



# FIRST PRESBYTERIAN CHURCH

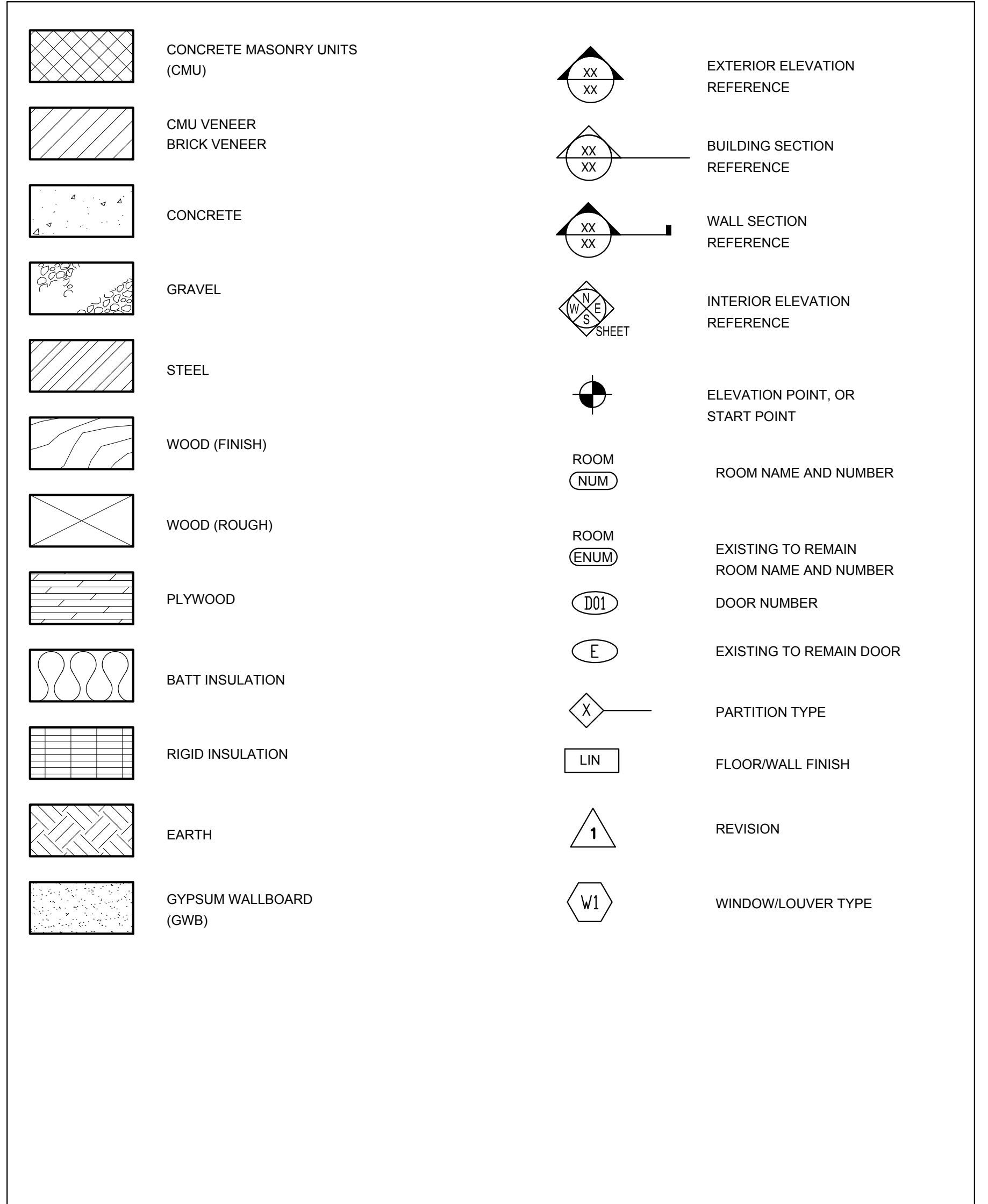
40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

## PERMIT PACKAGES

MARCH 14, 2014

KERN S GROUP  
A R C H I T E C T S

## GRAPHIC STANDARDS



## GENERAL NOTES

- REPORT DISCREPANCIES AND QUESTIONS TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- BEFORE BEGINNING WORK AT THE SITE, WHERE POSSIBLE AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES TO THE ARCHITECT BEFORE DOING WORK RELATED TO THAT BEING INSPECTED.
- THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE DRAWINGS DUE TO CHANGES AFFECTING EXISTING SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS AND DETERMINE WORK NEEDED AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST OR TIME.
- DRAWINGS SHOW EXTENT OF THE PROPOSED ARCHITECTURAL WORK AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS ON THE EXISTING STRUCTURE. CONTRACTOR SHOULD FIELD VERIFY ALL CONDITIONS AND REPORT ANY INCONSISTENCY TO THE ARCHITECT.
- PROTECT EXISTING WORK, AND EXISTING CONDITIONS TO REMAIN FROM DAMAGE.
- NOTES ARE NOT INTENDED TO REPRESENT EVERY CONDITION WHICH THE CONTRACTOR MAY ENCOUNTER ON THE EXISTING STRUCTURE.
- DETERMINE LOCATION OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER, WINDOW JAMB OR MULLION, OR OTHER SIMILAR FIXED ITEM.
- DIMENSIONS TO EXISTING SURFACES ARE GENERALLY NOTED TO THE EXISTING FINISHED FACE. DIMENSIONS TO NEW MASONRY ARE TO ROUGH FACE OF UNITS. MASONRY DIMENSIONS ARE NOMINAL. DIMENSIONS TO NEW CHANNEL STUD OR FURRED CHANNEL PARTITIONS ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED. CHANNEL STUD PARTITIONS DIMENSIONS ARE NOMINAL.
- UNLESS NOTED OTHERWISE, ALL DOORS ARE LOCATED 6" FROM HINGE SIDE OF FRAME TO FINISHED FACE OF ADJACENT PARTITION.
- EXCEPT IN SPACES WHERE NO WORK UNDER THIS CONTRACT IS REQUIRED, ENCLOSE EXISTING AND NEW CONDUIT, DUCTS, PIPES AND SIMILAR ITEMS IN FURRING WHERE SUCH ITEMS PASS THROUGH FINISHED SPACES WHETHER OR NOT FURRING IS INDICATED.
- FURR TO CONCEAL HORIZ. DUCTS PASSING THROUGH EXISTING OR NEW SPACES WHERE IT IS NOT POSSIBLE TO INSTALL THE DUCTS ABOVE THE CEILING. USE GYPSUM BOARD FOR SUCH FURRING.
- PROVIDE ACCESS PANELS IN GWB CEILINGS AND BULKHEADS IN LOCATIONS AND SIZES AS REQ'D BY ANY TRADES FOR SERVICES, MAINTENANCE OR CODE. COORDINATE LOCATIONS OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION.
- REPAIR DAMAGE FROM DEMOLITION IF THE FINISHED SURFACE HAS BEEN AFFECTED AND IS VISIBLE TO VIEW. FINISH TO MATCH EXISTING.

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### KITCHEN REMODEL

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### MECHANICAL

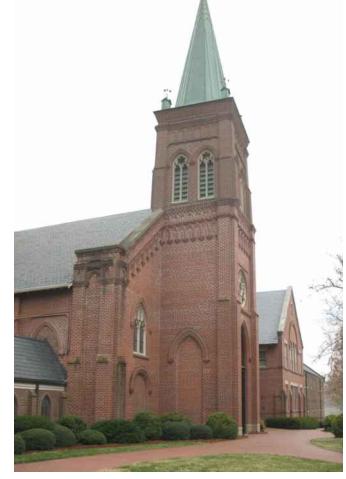
M1 MECHANICAL NOTES & SCHEDULES  
M2 MECHANICAL PLANS & DEMOLITION PLANS  
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## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

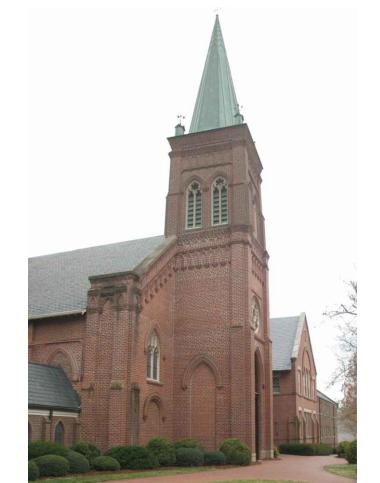
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### PROJECT DATA

DRAWING NO.  
**T.2**

## ABBREVIATIONS

AB	ANCHOR BOLT	D	DEEP	HR	HANDRAIL	P.C.	PRECAST	T & G	TONGUE & GROVE
ABV	ABOVE	DBL	DOUBLE	HT	HEIGHT	PLAS	PLASTER	TB	TACKBOARD
ACT	ACOUSTICAL CEILING TILE	DISP	DISPENSER	HTR	HEATER	PLAM	PLASTIC LAMINATE	TCS	TERNE COATED STAINLESS STL
ADDL	ADDITIONAL	DS	DOWNSPOUT	HV	HIGH VOLTAGE	PLYWD	PLYWOOD	TEMP	TEMPERED
AD	AREA DRAIN	DTL	DETAIL	DRAWING	INFO	PM	PROJECT MANAGER/OFFICER	TME	TO MATCH EXISTING
ADJT	ADJACENT	DW	DISHWASHER	JST	INSULATION	PNL	PANEL	T.O.	TOP OF
A.F.F.	ABOVE FLOOR FINISH	DWG	DRAWING	INTER	INTERMEDIATE	POL	POLISHED	T.O.C.	TOP OF CONCRETE
ALT	ALTERNATE	ELEV	ELEVATION	INTERIOR	INTERIOR	P.R.L.	PROPERTY LINE	T.O.M.	TOP OF MASONRY
ALUM	ALUMINUM	EQ	EQUAL	INT	INT	P.T.	PRESERVATIVE TREATED	T.O.S.	TOP OF STEEL
AP	ACCESS PANEL	EJ	EXPANSION JOINT	JB	JUNCTION BOXES	PTD	PAINTED	T.O.W.	TOP OF WALL
APP	APPROVED	EL	ELEVATION	JST	JOIST	PVC	POLYVINYL CHLORIDE	TYP	TYPICAL
APPROX	APPROXIMATELY	ELEV	ELEVATOR OR ELEVATION	JOINT	JOINT	R	RADIUS	U.CAB.	UPPER CABINET
@	AT	EQ	EQUAL	L	LONG	R & S	ROD & SHELF	U.O.N.	UNLESS OTHERWISE NOTED
ARCH	ARCHITECT	ETR	EXIST/EXG	LAM	LAMINATE	RBB	RUBBER	V.B.	VAPOR BARRIER
AV	AUDIO/VIDEO	EWC	EXISTING	LAV	LAVATORY	R.D.	ROOF DRAIN	VCT	VINYL COMPOSITION TILE
B & B	BOARD AND BATTEN	EXP	EXPANDED	LT	LIGHT	REF	REFERENCE	VERT	VERTICAL
BD	BOARD	EXT	EXTERIOR	MACH	MACHINE	REFL	REFLECTED	V.I.F.	VERIFY IN FIELD
BM	BEAM	F.A.	FIRE ALARM	MAT	MASONRY	REFG	REFRIGERATOR	REQD	REQUIRED
B.O.	BOTTOM OF	F.O.	FACE OF	MAX	MATERIAL	REINF	REINFORCED	RESL	RESILIENT
BOT	BOTTOM	FCP	FIBER CEMENT PANEL	MIN	MATERIAL	RESIL	RESILIENT	W	WIDE
B.R.	BACKER ROD	FIN	FINISHED	M.O.	MASONRY OPENING	RFG	ROOFING	W/	WITH
BRG	BEARING	FEC	FIRE EXTINGUISHER CABINET	M.R.	MOISTURE RESISTANT	RM	ROOM	WD	WOOD
BSBD	BASEBOARD	FIXT	FIXTURE	MTD	MONTED	R.O.	ROUGH OPENING	WDW	WINDOW
BTW	BETWEEN	FLASH	FLASHING	MTL	MANUFACTURER	RR	REST ROOM	WP	WATERPROOF
BU	BACK UP	FLR	FLOOR	MIN	MINIMUM	RTU	ROOF TOP UNIT	WR	WATER RESISTANT
B.U.R.	BUILT UP ROOFING	FD	FLOOR DRAIN	M.O.	MOSRY OPENING	SAFB	SOUND ATTENUATING	WT	WEIGHT
CAB	CABINET	FTG	FOOTING	NAT	NATURAL	SCWD	FIRE BLANKET	WWF	WELDED WIRE FABRIC
CB	CHALKBOARD	FR	FIRE RETARDANT	N.I.C.	NOT IN CONTRACT	SCHED	SOLID CORE WOOD		
CH	CHANNEL	GWB	GYPSUM WALLBOARD	N.T.S.	NOT TO SCALE	SIM	SCHEDULE		
CI	CAST IRON	FOUND	FOUNDATION			SLR	SIMILAR		
CJ	CONTROL JOINT	FURR	FURRING			SOG	SEALER		
CL	CLOSET					SM	SLAB ON GRADE		
CLG	CEILING					SM	SEAM		
CMU	CONCRETE MASONRY UNIT	GA	GAUGE			SM	SPECIFICATION		
CO	CASED OPENING	GC	GENERAL CONTRACTOR			SS	STAINLESS STEEL		
COL	COLUMN	GF	GROUND FACE			STD	STANDARD		
COMP	COMPRESSED	GL	GLASS			STGR	STRINGER		
CONC	CONCRETE	GWB	GYPSUM WALLBOARD			STL	STEEL		
COND	CONDITION					STN	STAIN		
CONN	CONNECTION	H	HIGH	O/	OVER	STRUCT	STRUCTURAL		
CONT	CONTINUOUS	HCIWD	HOLLOW CORE WOOD	OC	ON CENTER	SUSP	SUSPENDED		
COORD	COORDINATE	HCP	HANDICAPPED	O.H.	OPPOSITE HAND	SW	SWITCH		
CORRUG	CORRUGATED	HD	HEAD	OPNG	OPENING				
CPT	CARPET	HDWR	HARDWARE						
CS	CAST STONE	HM	HOLLOW METAL						
CT	CERAMIC TILE	HORIZ	HORIZONTAL	PART	PARTITION				



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40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

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BUILDING CODE ANALYSIS

DRAWING NO.  
**T.3**

KGA PROJECT NO. 1103.03

### 2012 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: FIRST PRESBYTERIAN CHURCH, CHANCEL RENOVATION  
Address: 40 Church Street, Asheville, NC Zip Code 28801  
Proposed Use: Unchanged (Religious Worship)  
Owner/Authorized Agent: Paul Vick Phone # (828) 277 - 6111 E-Mail pvick@earthlink.net  
Owned By:  City/County  Private  State  
Code Enforcement Jurisdiction:  City Asheville, NC  County  State

**LEAD DESIGN PROFESSIONAL:** KERNS GROUP ARCHITECTS, P.C.  
DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL  
Architectural KERNS GROUP ARCHITECTS, PC Brian Frickie (703)929-9138 bfrickie@kerngroup.com  
Civil N/A  
Electrical Tilden White & Assoc. PLLC Tilden White 028953 (828)255-4327 tw@tildenwhite.com  
Fire Alarm Tilden White & Assoc. PLLC Tilden White 028953 (828)255-4327 tw@tildenwhite.com  
Plumbing N/A  
Mechanical Tilden White & Assoc. PLLC Tilden White 028953 (828)255-4327 tw@tildenwhite.com  
Sprinkler-Standpipe N/A  
Structural Kloesel Engineering E. J. Kloessel 014320 (828)255-0780 woody@kloesel-engineering.com  
Retaining Walls >5' High N/A  
Other N/A

2012 EDITION OF NC CODE FOR:  New Construction  Addition  Upfit  
EXISTING:  Reconstruction  Alteration  Repair  Renovation  
CONSTRUCTED: (date) ORIGINAL USE(S) (Ch. 3): Assembly - Place for Worship  
RENOVATED: (date) 2001 CURRENT USE(S) (Ch. 3): Assembly - Place for Worship  
PROPOSED USE(S) (Ch. 3): Assembly - Place for Worship

**BASIC BUILDING DATA**  
Construction Type:  I-A  II-A  III-A  IV  V-A  
(check all that apply)  I-B  II-B  III-B  V-B  
Sprinklers:  No  Partial  Yes  NFPA 13  NFPA 13R  NFPA 13D  
Standpipes:  No  Yes Class  I  II  III  Wet  Dry  
Fire District:  No  Yes (Primary) Flood Hazard Area:  No  Yes  
Building Height: (feet) Gross Building Area:  
SEE ATTACHED SHEET T12 - 2001 CODE SUMMARY FOR ALLOWABLE AREA AND ALLOWABLE  
HEIGHT ANALYSIS. THIS PROJECT INVOLVES NO ADDITIONAL AREA.

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6 <sup>th</sup> Floor			
5 <sup>th</sup> Floor			
4 <sup>th</sup> Floor			
3 <sup>rd</sup> Floor			
2 <sup>nd</sup> Floor			
Mezzanine			
1 <sup>st</sup> Floor			
Basement			
TOTAL			

2012 NC Administrative Code and Policies

### LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:  No  Yes  
Exit Signs:  No  Yes  
Fire Alarm:  No  Yes  
Smoke Detection Systems:  No  Yes  Partial \_\_\_\_\_  
Panic Hardware:  No  Yes

### LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: \_\_\_\_\_  
 Fire and/or smoke rated wall locations (Chapter 7)  
 Assumed and real property line locations  
 Exterior wall opening area with respect to distance to assumed property lines (705.8)  
 Existing structures within 30' of the proposed building  
 Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)  
 Occupant loads for each area  
 Exit access travel distances (1016)  
 Common path of travel distances (1014.3 & 1028.8)  
 Dead end lengths (1018.4)  
 Clear exit widths for each exit door  
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)  
 Actual occupant load for each exit door  
 A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation  
 Location of doors with panic hardware (1008.1.10)  
 Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)  
 Location of doors with electromagnetic egress locks (1008.1.9.8)  
 Location of doors equipped with hold-open devices  
 Location of emergency escape windows (1029)  
 The square footage of each fire area (902)  
 The square footage of each smoke compartment (407.4)  
 Note any code exceptions or table notes that may have been utilized regarding the items above

### STRUCTURAL DESIGN

**DESIGN LOADS:**  
**Importance Factors:** Wind (I<sub>w</sub>) 1.15  
Snow (I<sub>s</sub>) 1.10  
Seismic (I<sub>e</sub>) 1.25  
**Live Loads:** Roof 20 psf  
Mezzanine N/A psf  
Floor 100 psf  
**Ground Snow Load:** 15 psf  
**Wind Load:** Basic Wind Speed 90 mph (ASCE-7)  
Exposure Category C  
Wind Base Shears (for MWFRS) V<sub>x</sub> = N/A V<sub>y</sub> = N/A

2012 NC Administrative Code and Policies

### SEISMIC DESIGN CATEGORY:

Provide the following Seismic Design Parameters:

Occupancy Category (Table 1604.5)  I  II  III  IV  
Spectral Response Acceleration S<sub>g</sub> 58 %g  
Site Classification (Table 1613.5.2)  A  B  C  D  E  F  
Data Source:  Field Test  Presumptive  Historical Data

**Basic structural system (check one)**

Bearing Wall  Dual w/Special Moment Frame  
 Building Frame  Dual w/Intermediate R/C or Special Steel  
 Moment Frame  Inverted Pendulum

**Seismic base shear:** V<sub>x</sub> = 5 k V<sub>y</sub> = 5 k  
**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic  
**Architectural, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:** Earthquake  Wind

### SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) N/A psf  
Presumptive Bearing capacity N/A psf  
Pile size, type, and capacity N/A

**SPECIAL INSPECTIONS REQUIRED:**  Yes  No

### PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

### NO CHANGES TO PLUMBING FIXTURES

### SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

### ENERGY SUMMARY

### NO CHANGES TO EXTERIOR SURFACES. ALL WORK IS INTERIOR

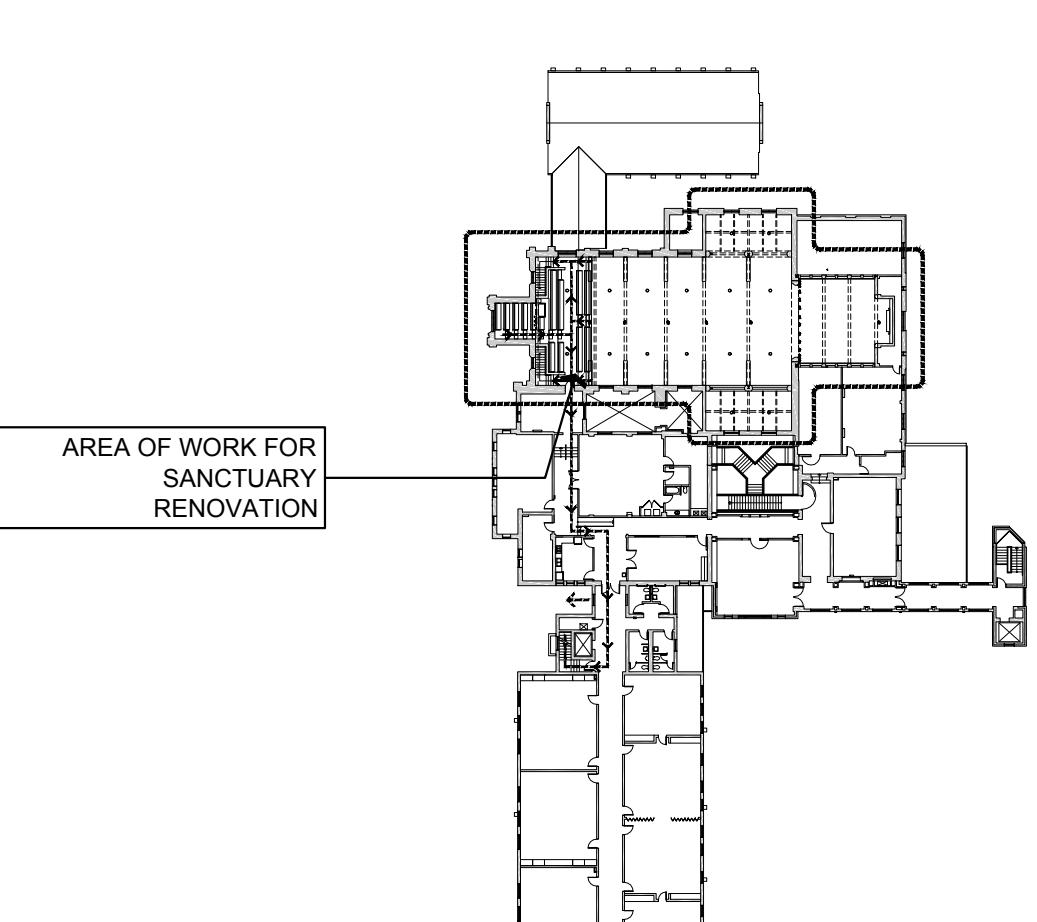
### MECHANICAL SUMMARY

REFER TO SHEET M1 IN MECHANICAL DRAWINGS FOR THE SANCTUARY RENOVATION PROJECT

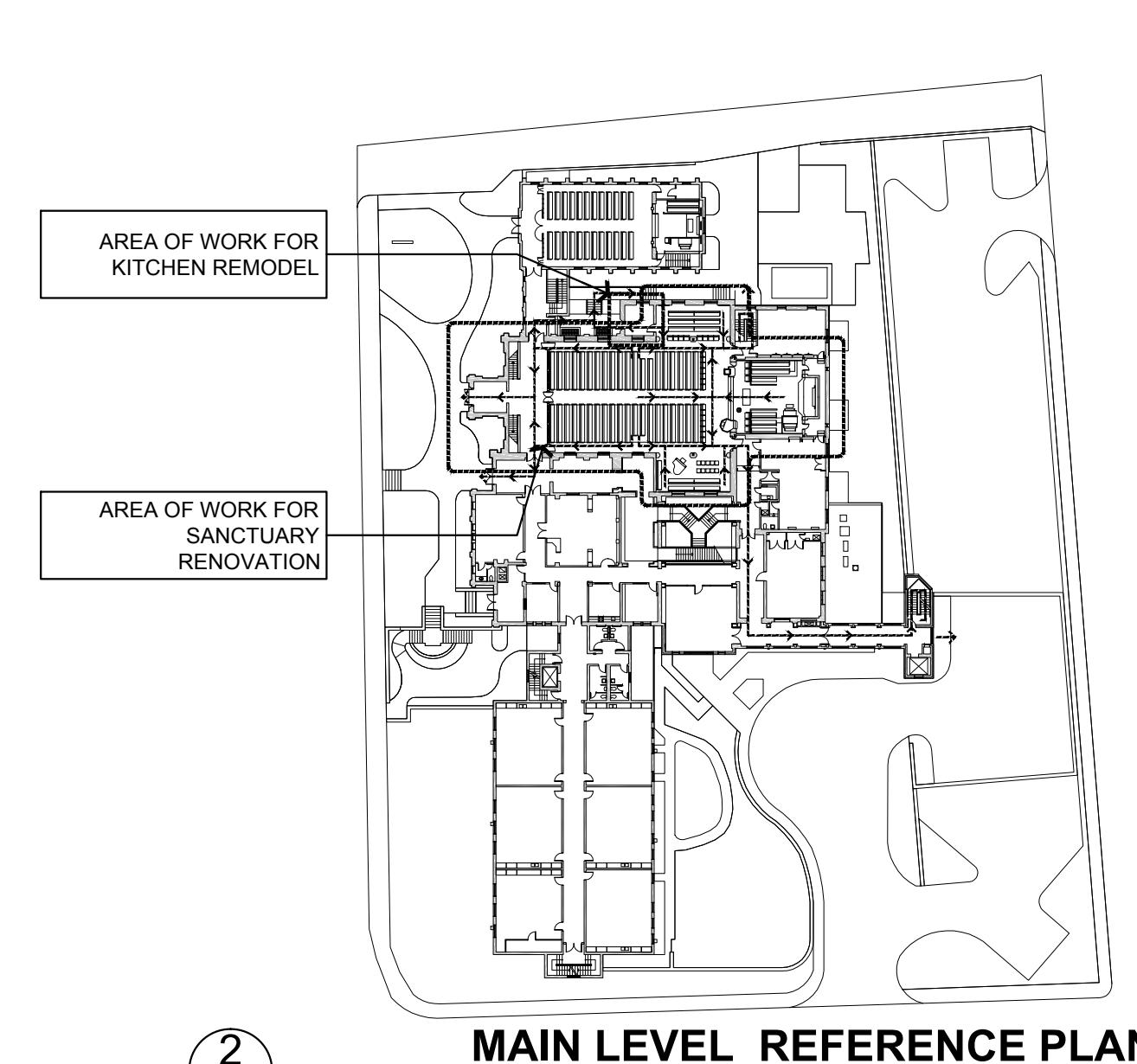
### ELECTRICAL SUMMARY

REFER TO SHEET E1 IN ELECTRICAL DRAWINGS FOR THE SANCTUARY RENOVATION PROJECT

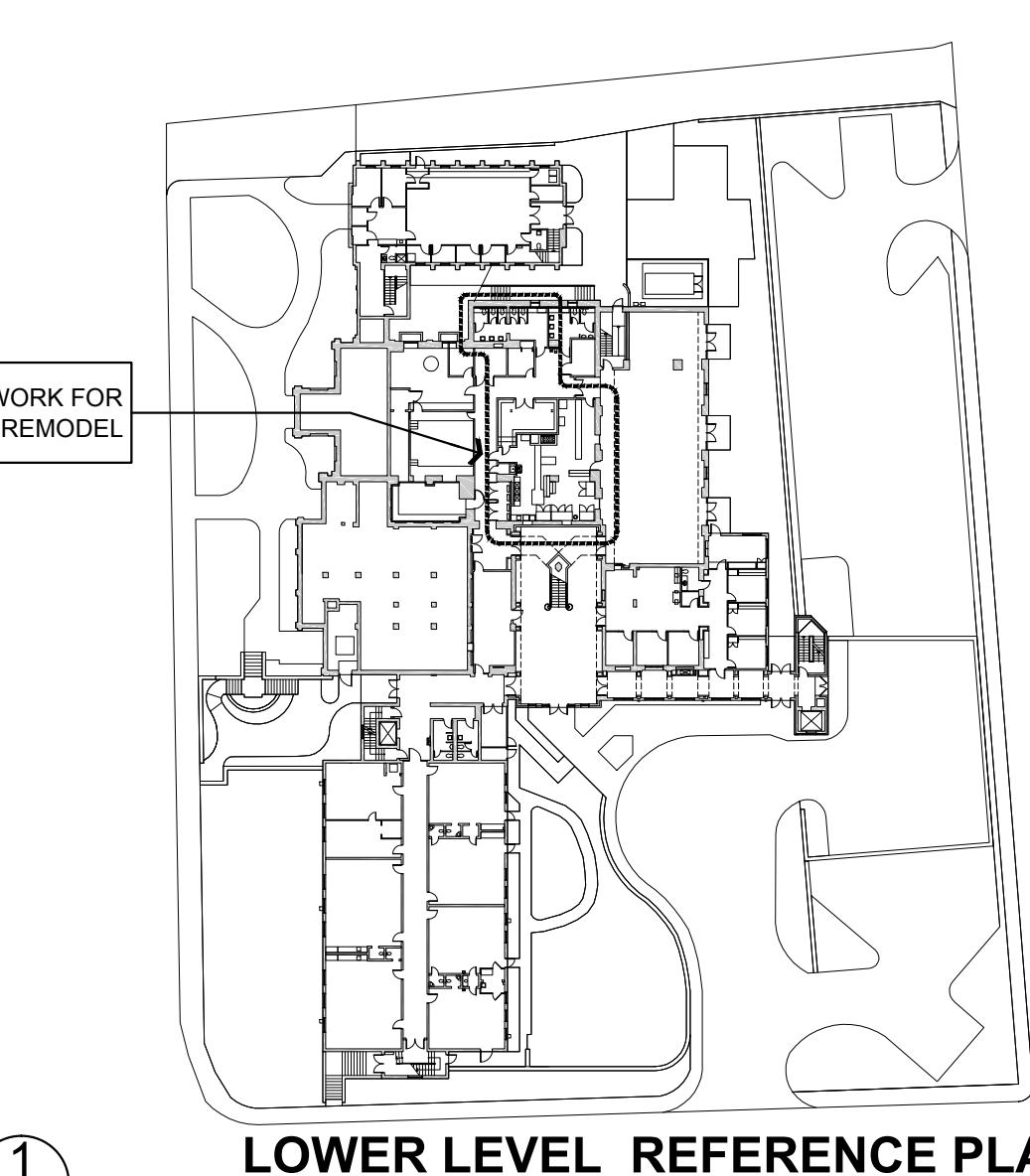
2012 NC Administrative Code and Policies



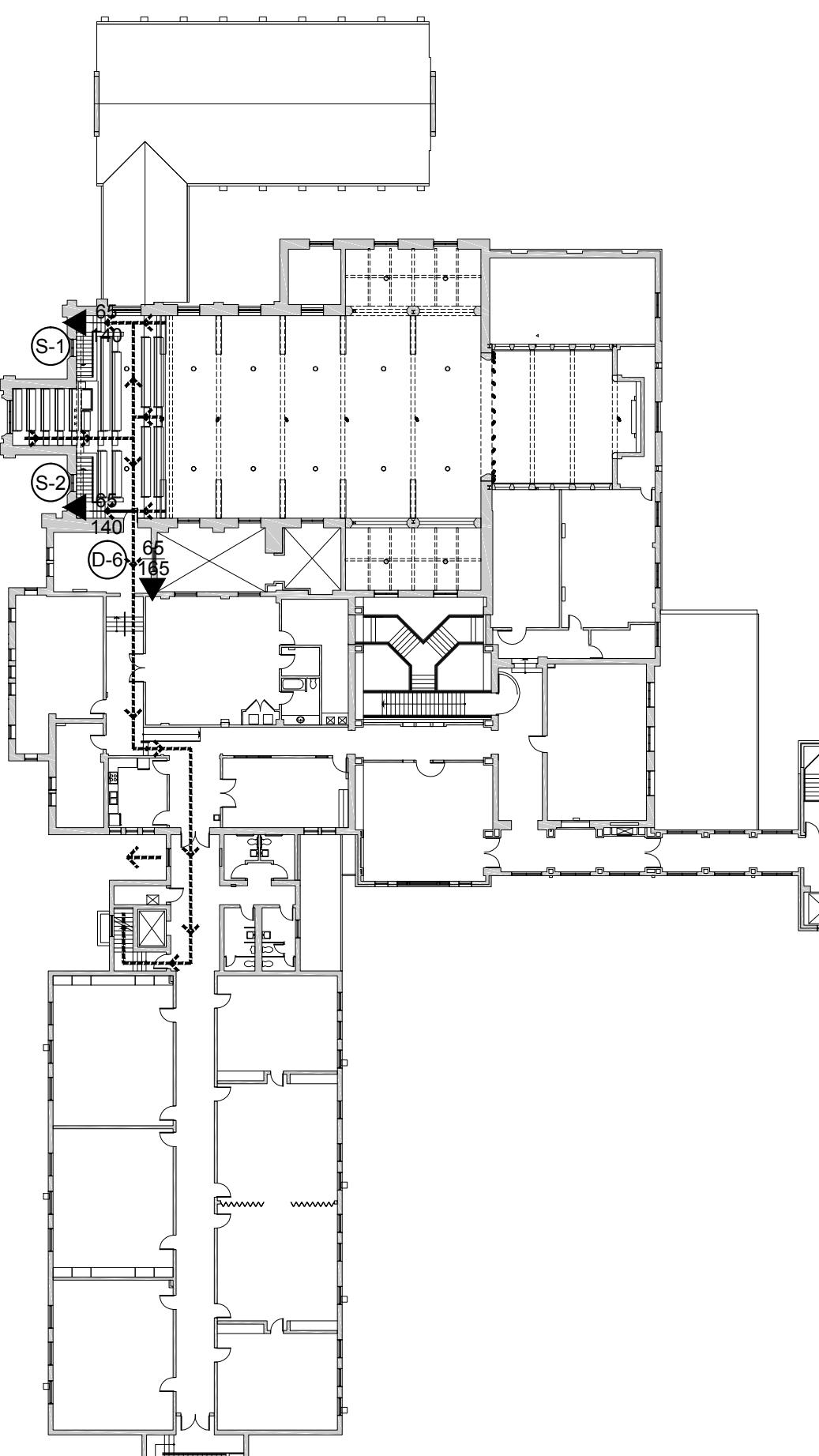
UPPER LEVEL REFERENCE PLAN



MAIN LEVEL REFERENCE PLAN

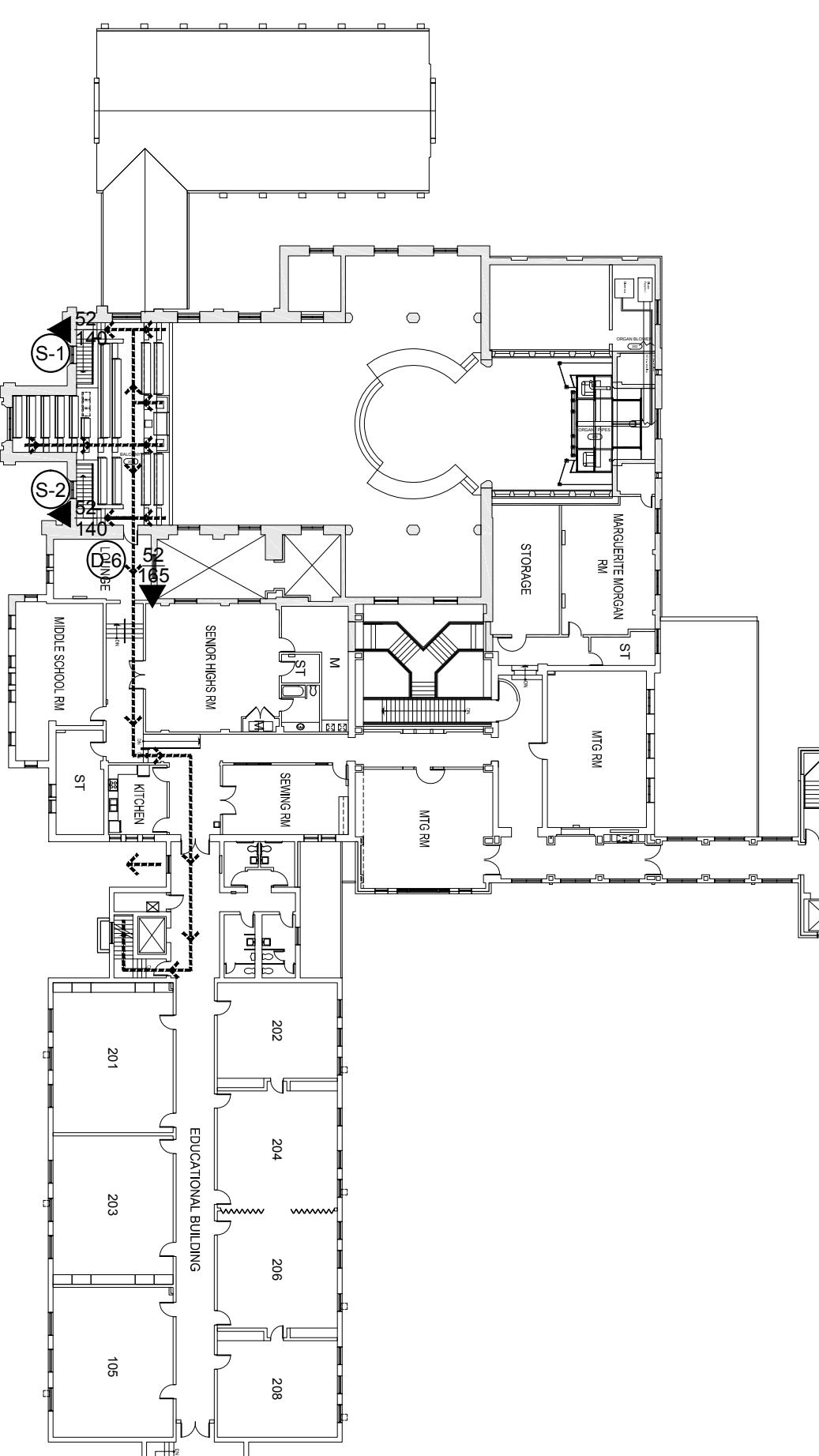


LOWER LEVEL REFERENCE PLAN



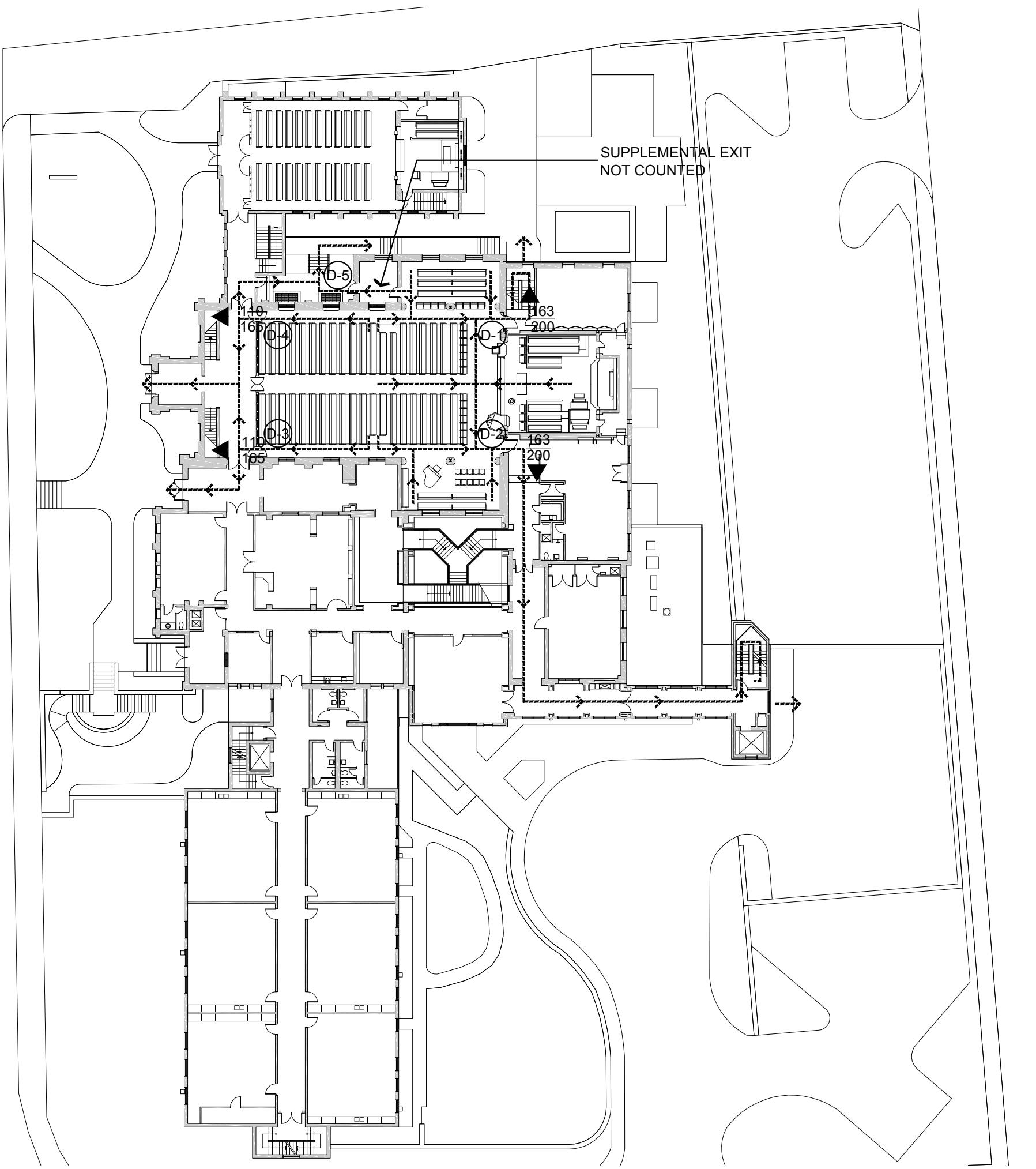
EXISTING UPPER LEVEL - LIFE SAFETY PLAN

Scale: 1/32"=1'-0"



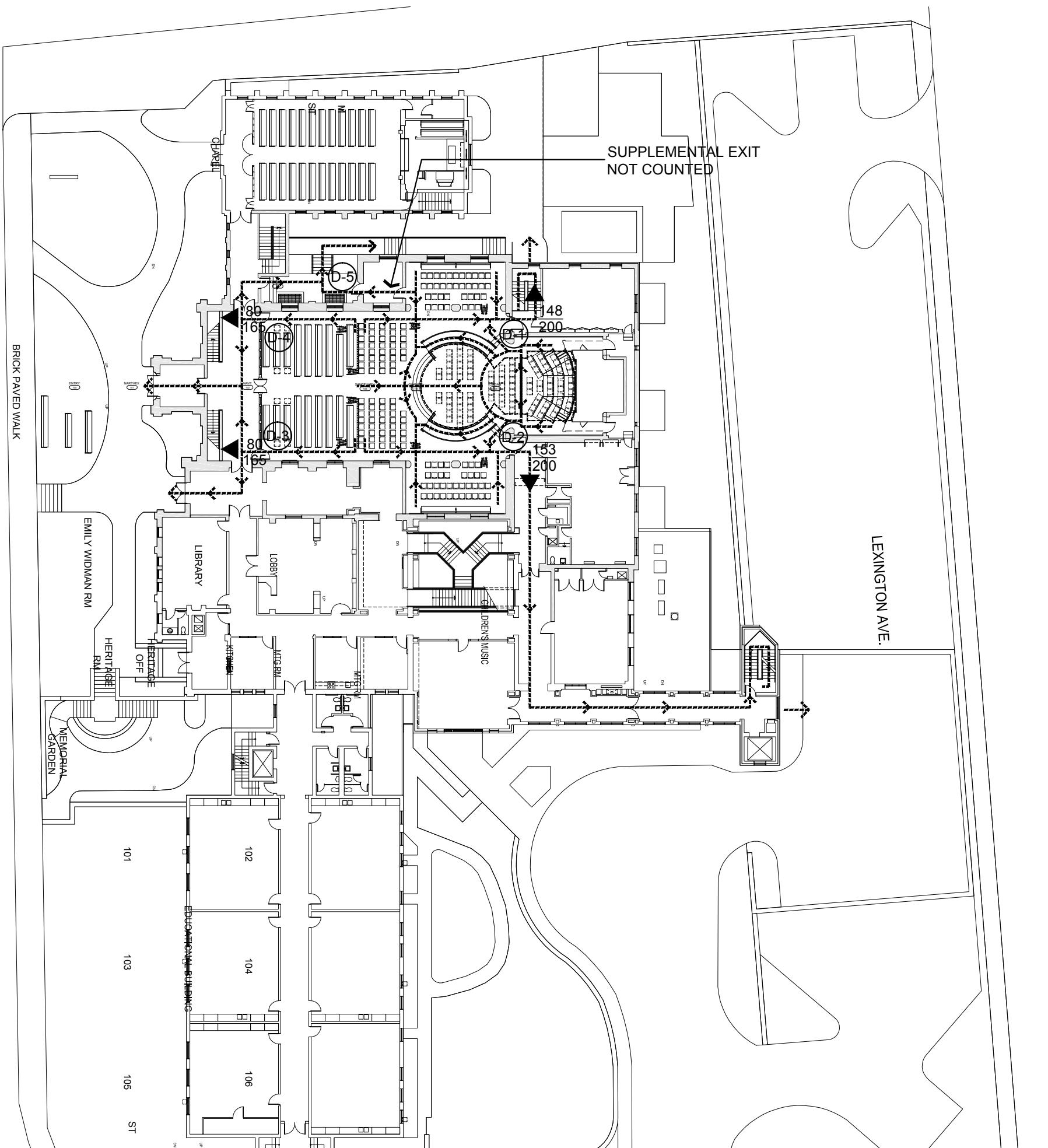
PROPOSED UPPER LEVEL - LIFE SAFETY PLAN

Scale: 1/32"=1'-0"



EXISTING MAIN LEVEL - LIFE SAFETY PLAN

Scale: 1/32"=1'-0"



PROPOSED MAIN LEVEL - LIFE SAFETY PLAN

Scale: 1/32"=1'-0"

LIFE SAFETY NOTES - EXISTING WORSHIP SPACE OCCUPANT LOAD

NAVE	
PEWS @ 18"	460
ELDER/DEACON CHAIRS	22
CHAIRS	10
MISC. OCCUPANTS (PIANO)	5
HC	4
TOTAL	497

CHANCEL	
CHOIR PEWS @ 18"	44
MISC. OCCUPANTS (ORGAN, PIANO, PULPIT, TABLE, ETC.)	5
TOTAL	49

TOTAL OCCUPANTS MAIN LEVEL 546

BALCONY	
PEWS @ 18"	129

TOTAL OCCUPANTS WORSHIP SPACE 675

EGRESS REQUIREMENTS

MAIN LEVEL

3 EXITS REQUIRED (FOR OCC LOADS FROM 501 TO 1,000 BY SECTION 1021.1)  
MIN WIDTH OF EGRESS DOORS PER OCCUPANT = 0.2 PER OCCUPANT  
PER 1005.1

545 X 0.20 = 109"  
EXISTING # OF DOORS: 5 TOTAL (4 COUNTED FOR EGRESS CALCULATION)  
D1 & D2 2 @ 40" CLEAR  
D3 & D4 2 @ 33" CLEAR  
D5 1 @ 33" CLEAR (NOT COUNTED)

COMBINED WIDTH = 146" (> 109" REQUIRED PER 1005.1)

BALCONY  
2 EXITS REQUIRED (FOR OCC LOADS FROM 1 TO 500 BY SECTION 1021.1)  
MIN WIDTH OF EGRESS STAIRS PER OCCUPANT = 0.3 PER OCCUPANT  
PER 1005.1

129 X 0.30 = 39"  
EXISTING # OF STAIRS: 2 TOTAL  
S1 42"  
S2 42"

EGRESS STAIR WIDTH = 84" (> 39" REQUIRED PER 1005.1)  
MIN WIDTH OF EGRESS DOORS PER OCCUPANT = 0.2 PER OCCUPANT  
PER 1005.1

129 X 0.20 = 26"  
EXISTING # OF DOORS: 1 D6 36" CLEAR

TOTAL DOOR WIDTH = 36" (> 26" REQUIRED PER 1005.1)

O W N E R  
FIRST PRESBYTERIAN CHURCH  
40 CHURCH STREET  
ASHEVILLE, NC 28801  
828.253.1431 FAX 828.253.3192

S T R U C T U R A L E N G I N E E R  
KLOESEL ENGINEERING  
8 MAGNOLIA AVENUE, SUITE 100  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.250.0780 CEL 828.231.4910

M P E E N G I N E E R S  
TILDEN WHITE & ASSOC.  
351 MERRIMON AVENUE  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.255.4327

A U D I O V I S U A L C O N S U L T A N T  
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703.506.0005 FAX 703.506.0009

L I G H T I N G C O N S U L T A N T  
HARTRANT LIGHTING DESIGN  
214 WEST TREMONT AVENUE  
SUITE 500, CHARLOTTE, NC 28203  
TEL 240.731.1058



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100% DESIGN DEVELOPMENT SET 13 DEC 2013  
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LIFE SAFETY PLANS

DRAWING NO.  
**T.3A**

KGA PROJECT NO. 1103.03

LEGEND	
	CONCENTRATED SEATING AREA - ALTERATION
	EXISTING EGRESS DOOR TO REMAIN
	# OF OCCUPANTS SERVED BY EGRESS COMPONENT MAX. OCCUPANT CAPACITY OF EGRESS COMPONENT

# KITCHEN REMODEL FOR: FIRST PRESBYTERIAN CHURCH

40 Church St.  
Asheville, NC

## 2012 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project:	Kitchen Remodel for First Presbyterian Church		
Address:	40 Church St., Asheville, NC	Zip Code:	28801
Proposed Use:	Prepare meals for church functions and day care facility		
Owner/Authorized Agent:	Paul Vick	Phone #:	(828) 277-6111
Owning:	<input type="checkbox"/> City/County	<input checked="" type="checkbox"/> Private	<input type="checkbox"/> State
Code Enforcement Jurisdiction:	<input type="checkbox"/> City Asheville, NC	<input type="checkbox"/> County	<input type="checkbox"/> State

<b>LEAD DESIGN PROFESSIONAL:</b> George Stowe - Architect			
DESIGNER	FIRM	NAME	LICENSE #
Architectural	George Stowe	George Stowe	4501 (828) 251-357, stowearchitect@bellsouth.net
Civil			
Electrical	Tilden White & Associates, PLLC	Tilden White	028953 (828) 255-4327, tilden@tildenwhite.com
Fire Alarm	Tilden White & Associates, PLLC	Tilden White	028953 (828) 255-4327, tilden@tildenwhite.com
Plumbing	Tilden White & Associates, PLLC	Tilden White	028953 (828) 255-4327, tilden@tildenwhite.com
Mechanical	Tilden White & Associates, PLLC	Tilden White	028953 (828) 255-4327, tilden@tildenwhite.com
Sprinkler-Standpipe			
Structural			
Retaining Walls >5' High			
Other			

2012 EDITION OF NC CODE FOR:	<input type="checkbox"/> New Construction	<input type="checkbox"/> Addition	<input type="checkbox"/> Upfit	
EXISTING:	<input type="checkbox"/> Reconstruction	<input type="checkbox"/> Alteration	<input type="checkbox"/> Repair	<input checked="" type="checkbox"/> Renovation
CONSTRUCTED: (date)	ORIGINAL USE(S) (Ch. 3): Assembly for Worship			
RENOVATED: (date)	CURRENT USE(S) (Ch. 3): Prepare meals for church function and day care facility			
PROPOSED USE(S) (Ch. 3):	same			

### CODE NOTES:

This project involves interior remodel of the existing kitchen area of 1505 sq.ft. The purpose is to improve the functional flow of the available kitchen area, new, more efficient appliances, upgrade to existing utilities, and improvement to building safety by the addition of a new range hood and vent system.

There are no structural changes, no changes to existing egress pattern, no new fire barriers.

The building code summary information that was prepared for the 2001 major additions and alterations to the existing facility is attached for reference. See attached sheet T1.2 dated May 4, 2001.

Note: The 2001 code summary lists construction type as Type V, protected. This type is equivalent to current Type III A (protected). In consideration of this information, 1 hour fire protection is added to 2 existing steel columns in the Pantry. The kitchen area was not included in the 2001 project area.

<b>BASIC BUILDING DATA</b>							
Construction Type:	<input type="checkbox"/> I-A	<input type="checkbox"/> II-A	<input checked="" type="checkbox"/> III-A	<input type="checkbox"/> IV	<input type="checkbox"/> V-A	<input type="checkbox"/> V-B	
(check all that apply)	<input type="checkbox"/> I-B	<input type="checkbox"/> II-B	<input type="checkbox"/> III-B				
Sprinklers:	<input type="checkbox"/> No	<input type="checkbox"/> Partial	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NFPA 13	<input type="checkbox"/> NFPA 13R	<input type="checkbox"/> NFPA 13D	
Standpipes:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Class I	<input type="checkbox"/> II	<input type="checkbox"/> III	<input type="checkbox"/> Wet	<input type="checkbox"/> Dry
Fire District:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes (Primary)		Flood Hazard Area: <input type="checkbox"/> <input checked="" type="checkbox"/> Yes			
Building Height: (feet)							

See the attached 2001 Code Summary for allowable area and allowable height analysis. This project involves no new additional area

### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (W/ PERMITTING REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		1 hr.	1 hr.	T-1	UL Design X528 for steel columns		
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
No bearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction							
Including supporting beams and joists							
Roof Construction							
Including supporting beams and joists							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy Separation							
Party/Wire Wall Separation							
Smoke Barrier Separation							
Tenant Separation							
Incidental Use Separation							

\* Indicate section number permitting reduction

<b>LIFE SAFETY SYSTEM REQUIREMENTS</b>				
Emergency Lighting:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes		
Exit Signs:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	(outside project area)	
Fire Alarm:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	(modifications to extg's system)	
Smoke Detection Systems:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partial	<input type="checkbox"/> (modifications to extg's system)
Panic Hardware:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes		(outside project area)

### LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #:

T-1

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Existing structures within 30' of the proposed building
- Occupant types for each area as it relates to occupant load calculation (Table 1004.1.1)
- Occupant loads for each project area
- Exit access travel distances (1016)
- Common path of travel distances (1014.3 & 1028.8)
- Dead end lengths (1018.4)
- Clear widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1008.1.10)
- Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
- Location of doors with electromagnetic egress locks (1008.1.9.8)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1029)
- The square footage of each fire area (902)
- The square footage of each smoke compartment (407.4)
- Note any code exceptions or table notes that may have been utilized regarding the items above

### ACCESSIBLE DWELLING UNITS (SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

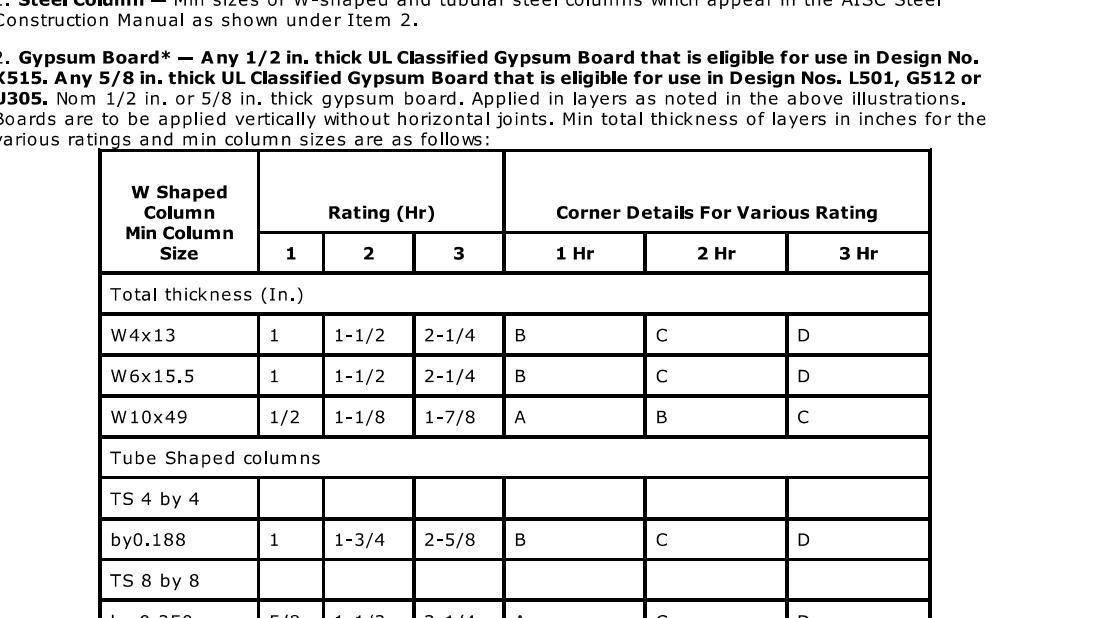
### PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

No changes to plumbing fixtures

### SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

### CORNER DETAILS OF WALLBOARD SUPPORT SYSTEMS WITHOUT STEEL COVERS



ACADIA DRYWALL SUPPLIES LTD (View Classification) — CKNX.R25370

AMERICAN GYPSUM CO (View Classification) — CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374

CERTAINTeed GYPSUM CANADA INC (View Classification) — CKNX.R15187

CERTAINTeed GYPSUM INC (View Classification) — CKNX.R3660

### ENERGY SUMMARY

No changes to exterior surfaces. All work is interior.

### MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

See Mechanical Engineers' Drawings

### ELECTRICAL SUMMARY

See Electrical Engineers' Drawings

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T1	TITLE SHEET, APPENDIX B, UL LISTING	01-14-2014 REV. 01-16-2014 REV. 01-30-2014
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A2	FLOOR PLANS, SECTIONS	01-14-2014 REV. 01-16-2014 REV. 01-30-2014
A3	REFLECTED CLNG. PLAN, FIN. SCH., CASEWORK ELEV.	01-14-2014
P1	PLUMBING NOTES & SCHEDULES	01-30-2014
P2	PLUMBING PLANS	01-30-2014
P3	PLUMBING DETAILS	01-30-2014
M1	MECHANICAL NOTES & SCHEDULES	01-30-2014
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E1	ELECTRICAL NOTES & SCHEDULES	01-30-2014
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H1	HOOD DETAILS & SCHEDULES	01-31-2014
H2	HOOD DETAILS & SCHEDULES	01-31-2014
H3	HOOD DETAILS & SCHEDULES	01-31-2014



DATE:  
01-14-2014  
REVISIONS:  
REVISED 01-16-2014  
REVISED 01-30-2014

**FIRST PRESBYTERIAN CHURCH**  
40 Church St.  
Asheville, NC

T1

Kitchen Remodel for:

GEOGE STOVE • ARCHITECT  
member, American Institute of Architects  
184 East Chestnut Street • Asheville, NC 28801  
ph 828-251-2527 • fax 828-225-0330  
gstowearchitect@bellsouth.net  
www.GeoGeorgeStoveArchitect.com

# Code Summary : Existing Building

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (as required by Vol 1-A, Appendix B, N.C. Building Code)			
Name of Project	First Presbyterian Church	Proposed Use	Church
Address or Location	10 Church Street, Asheville, NC 28801		
Owner or Contact Person	Mr. Bill McCaskill	Phone Number	(828) 253-1431
Code Enforcement Jurisdiction	City of Asheville		

DESIGNER OF RECORD:			
Designer	Designer's Name	License #	Telephone #
Architectural	John D. Rogers, FAIA	1743	(828) 253-8755
Electrical	Donald J. Burdette	12042	(864) 247-8777
Plumbing	Jerome Hoy	18486	(828) 255-4691
Mechanical	Jerome Hoy	18486	(828) 255-4691
Structural	Bernard Feinberg	4304	(828) 274-4440
Sprinkler Standpipe			
Fire Alarm			

BUILDING DATA: (Please fill in the blanks and circle the appropriate items below)

Fire District: No Yes High Rise: No Yes Bldg. Height ft. No. of Stories 3

Type of Occupancy	Construction Type	Gross Building Area
Assembly - small	I	30 PT
Business	II	862 PT
Educational	III	2370 PT
Mercantile	IV	264 PT
Hazardous	V	2615 PT
Factory - Industrial	VI	15420 PT
Storage	VII	
Residential	VIII	
Institutional (Unrestrained)	IX	
Institutional (Restrainted)	X	
Use Condition		
Wood Occupancy Yes No	TOTAL FLOOR AREA	Reference: 13 138 13D 668394
Separation Yes No		
Hours		
Design Loads	EADING / NO CHANGE TO EXISTING STRUCTURE & USE	
Wind	Seismic Performance Cat. A	
Importance Factor	Compliance w/Sec. 1607.3.1.1.	
ASCE-7-02 Exposure C	Ties and Continuity	
Floor	Seismic Performance B & C	
Show	Effective Peak Velocity Related Acceleration	
Lateral Design	Peak Acceleration Coef. Am=	
Wind	Amplitude-Peak Velocity Related Acceleration	
Calculated Wind Load Shear (for WPS)	Seismic Hazard Exp. Group SPC=	
Soil Bearing Capacities	Site Condition S=	
Premises	Basic Structural System (Check One)	
Field Test	Bearing Wall	
Modal Analysis Procedure	Welded Wire Frame	
Model Base Shear	Monolithic Frame	
RFI Procedure Base Shear	Dual w/Special Moment Frame	
Architectural, Mechanical, Components anchored per force C9P	Dual w/Intermediate R/C or Special Frame	
	Inverted Pendulum	
	Response modification factor R=r	
	Deflection amplification factor Cdc=	
	Response modification factor R=r	
	Deflection amplification factor Cdc=	
	Field Test	
	Modal Base Shear	
	RFI Procedure Base Shear	
	Architectural, Mechanical, Components anchored per force C9P	
	Building Height Int. feet H=	
	Structural Base Shear V=	

FIRE RESISTANCE RATINGS (3) EXIST / NO CHANGE TO EXISTING STRUCTURE & USE			
	REQUIRED HOURLY (2)	DETAIL # & SHEET # OF BUILDING PLANS	% WALL OPENING (1)
PARTY & FIRE WALLS:	4	None	
EXTERIOR BEARING WALLS:			
NORTH	1		No Limit
EAST	1		No Limit
WEST	1		No Limit
SOUTH	1		No Limit
EXTERIOR NON-BEARING WALLS:			
NORTH	NC		No Limit
EAST	NC		No Limit
WEST	NC		No Limit
SOUTH	NC		No Limit
INTERIOR WALLS:			
BEARING	1		
NON-BEARING	1		
TENANT SEPARATION	NA		
CEILING-FLOOR ASSEMBLY:	1		
BEAMS:	1		
COLUMNS:	1		
CEILING-ROOF ASSEMBLY:	1	Exist. Masonry	see Vol. I Table 109.4.1A
VERTICAL SHAFTS (4)	1		
CHASES - P.E.M.	1		
MIXED OCCUPANCY SEPARATION	0	See 704.1.3.1	
TENANT SEPARATION	NA		

FOOTNOTES FOR FIRE RESISTANCE RATINGS:

- Required if wall is property line or assumed property line is less than 30 feet.
- All fire rated walls shall be identified on plans by hatching, shading, etc. show legend on plans.
- Identify code section when using any special exceptions, etc.
- Stairs, elevators, and/or atrium.
- Details or Reproductions of rated assemblies/penetrations shall be incorporated on the drawings.

LIFE SAFETY SYSTEM:			
EMERGENCY LIGHTING & EXIT SIGNS	NO	YES	
FIRE ALARM & SMOKE DETECTION SYSTEMS	NO	YES	
PANIC HARDWARE	NO	YES	

EXIT REQUIREMENTS:			
DEAD END LIMIT - MAXIMUM CONDITION	20	FEET	
TRAVEL DISTANCE TO EXIT - MAXIMUM CONDITION	142	FEET	
NUMBER OF EXITS			
TOTAL SQ. FT. ON FLOOR		DIVIDED BY NET SQ. FT. PER OCCUPANCY	= TOTAL
NUMBER OF PERSONS ON FLOOR			
NUMBER OF DOORS PROVIDED		NUMBER OF DOORS REQUIRED	

# Code Summary : New Portion Of Building

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (as required by Vol 1-A, Appendix B, N.C. Building Code)			
---	--	--	--

Name of Project First Presbyterian Church Proposed Use Church  
Address or Location 10 Church Street, Asheville, NC 28801  
Owner or Contact Person Mr. Bill McCaskill Phone Number (828) 253-1431  
Code Enforcement Jurisdiction City of Asheville

DESIGNER OF RECORD:			
Designer	Designer's Name	License #	Telephone #
Architectural	John D. Rogers, FAIA	1743	(828) 253-8755
Electrical	Donald J. Burdette	12042	(864) 247-8777
Plumbing	Jerome Hoy	18486	(828) 255-4691
Mechanical	Jerome Hoy	18486	(828) 255-4691
Structural	Bernard Feinberg	4304	(828) 274-4440
Sprinkler Standpipe			
Fire Alarm			

BUILDING DATA: (Please fill in the blanks and circle the appropriate items below)

Fire District: No Yes High Rise: No Yes Bldg. Height ft. No. of Stories 3

Type of Occupancy	Construction Type	Gross Building Area
Assembly - small	I	30 PT
Business	II	862 PT
Educational	III	2370 PT
Mercantile	IV	264 PT
Hazardous	V	2615 PT
Factory - Industrial	VI	15420 PT
Storage	VII	
Residential	VIII	
Institutional (Unrestrained)	IX	
Institutional (Restrainted)	X	
Use Condition		
Wood Occupancy Yes No	TOTAL FLOOR AREA	Reference: 13 138 13D 668394
Separation Yes No		
Hours		
Design Loads	EADING / NO CHANGE TO EXISTING STRUCTURE & USE	
Wind	Seismic Performance Cat. A	
Importance Factor	Compliance w/Sec. 1607.3.1.1.	
ASCE-7-02 Exposure C	Ties and Continuity	
Floor	Seismic Performance B & C	
Show	Effective Peak Velocity Related Acceleration	
Lateral Design	Peak Acceleration Coef. Am=	
Wind	Amplitude-Peak Velocity Related Acceleration	
Calculated Wind Load Shear (for WPS)	Seismic Hazard Exp. Group SPC=	
Soil Bearing Capacities	Site Condition S=	
Premises	Basic Structural System (Check One)	
Field Test	Bearing Wall	
Modal Analysis Procedure	Welded Wire Frame	
Model Base Shear	Monolithic Frame	
RFI Procedure Base Shear	Dual w/Special Moment Frame	
Architectural, Mechanical, Components anchored per force C9P	Dual w/Intermediate R/C or Special Frame	
	Inverted Pendulum	
	Response modification factor R=r	
	Deflection amplification factor Cdc=	
	Field Test	
	Modal Base Shear	
	RFI Procedure Base Shear	
	Architectural, Mechanical, Components anchored per force C9P	
	Building Height Int. feet H=	
	Structural Base Shear V=	

FIRE RESISTANCE RATINGS (3) EXIST / NO CHANGE TO EXISTING STRUCTURE & USE			
	REQUIRED HOURLY (2)	DETAIL # & SHEET # OF BUILDING PLANS	% WALL OPENING (1)
PARTY & FIRE WALLS:	4	None	
EXTERIOR BEARING WALLS:			
NORTH	1		No Limit
EAST	1		No Limit
WEST	1		No Limit
SOUTH	1		No Limit
EXTERIOR NON-BEARING WALLS:			
NORTH	NC		No Limit
EAST	NC		No Limit
WEST	NC		No Limit
SOUTH	NC		No Limit
INTERIOR WALLS:			
BEARING	1		
NON-BEARING	1		
TENANT SEPARATION	NA		
CEILING-FLOOR ASSEMBLY:	1		
BEAMS:	1		
COLUMNS:	1		
CEILING-ROOF ASSEMBLY:	1	Exist. Masonry	see Vol. I Table 109.4.1A
VERTICAL SHAFTS (4)	1		
CHASES - P.E.M.	1		
MIXED OCCUPANCY SEPARATION	0	See 704.1.3.1	
TENANT SEPARATION	NA		

FOOTNOTES FOR FIRE RESISTANCE RATINGS:

- Required if wall is property line or assumed property line is less than 30 feet.
- All fire rated walls shall be identified on plans by hatching, shading, etc. show legend on plans.
- Identify code section when using any special exceptions, etc.
- Stairs, elevators, and/or atrium.
- Details or Reproductions of rated assemblies/penetrations shall be incorporated on the drawings.

LIFE SAFETY SYSTEM:			
EMERGENCY LIGHTING & EXIT SIGNS	NO	YES	
FIRE ALARM & SMOKE DETECTION SYSTEMS	NO	YES	
PANIC HARDWARE	NO	YES	

EXIT REQUIREMENTS:

DEAD END LIMIT - MAXIMUM CONDITION 20 FEET

TRAVEL DISTANCE TO EXIT - MAXIMUM CONDITION 142 FEET

NUMBER OF EXITS

TOTAL SQ. FT. ON FLOOR DIVIDED BY NET SQ. FT. PER OCCUPANCY = TOTAL

NUMBER OF PERSONS ON FLOOR

NUMBER OF DOORS PROVIDED NUMBER OF DOORS REQUIRED

FIRE RATING NOTE:			
ALL FLOOR/CEILING ASSEMBLIES ARE TO BE 1 HOUR RATED AS PER NC STATE BUILDING CODE VOL 1, TABLE 600, WHERE FLOOR CEILING ASSEMBLY IS EXISTING TO REMAIN THE UL RATING IS ASSUMED TO BE 1 HOUR.			
FOR CONCRETE CONSTRUCTION UL U402			
ALL PENETRATIONS IN FLOOR/CEILING ASSEMBLIES, NEW OR EXISTING SHALL BE SEALED IF NOT STOPPING TO MAINTAIN 1 HOUR FIRE RATING.			
UL ASSEMBLIES FOR NEW CONSTRUCTION ARE INDICATED ON SECTIONS AND REFERRED TO IN CODE SUMMARY ON SHEET T1.2.			

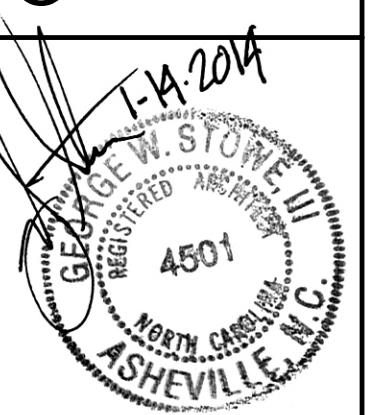
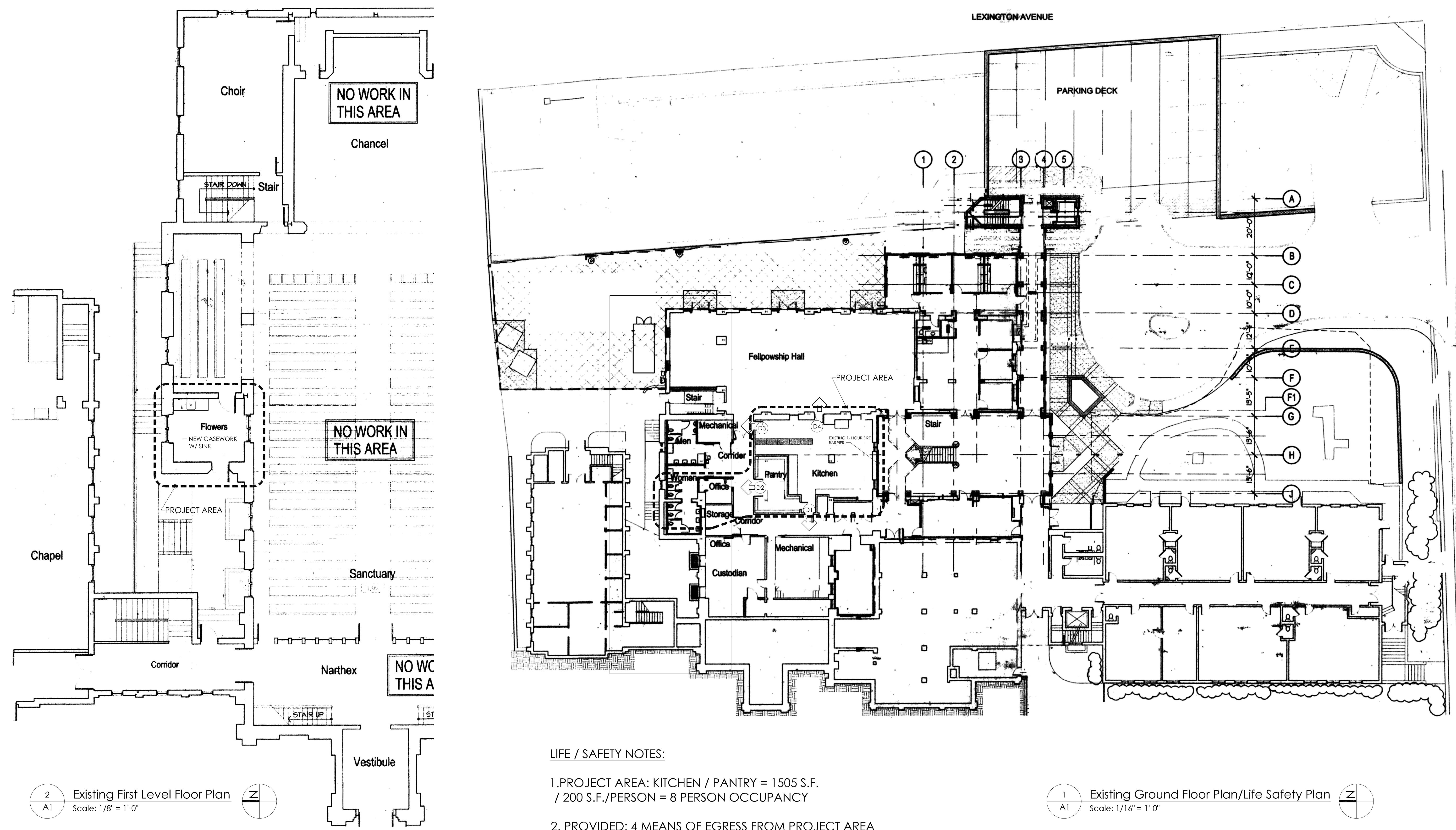
Legend - Fire Rated Partitions				
Line Symbol	Required Assembly	Existing Masonry	New Const. Metal Stud Frame	New Const. Masonry
-----	1 HOUR PARTITION W/DOOR	UL U405	UL U405	NA

# FIRST PRESBYTERIAN CHURCH

Kitchen Remodel for:

40 Church St.

A1



DATE:  
01-14-2014  
REVISIONS:  
\_\_\_\_\_

Asheville, NC



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

CONSTRUCTION DOCUMENTS PHASE  
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DEMOLITION MAIN LEVEL

DRAWING NO.  
**A1.0**

KGA PROJECT NO. 1103.03

### CHURCH MAIN LEVEL DEMOLITION PLAN

Scale: 3/16"=1'-0"

**LEGEND**  
DEMOLITION  
EXISTING WALLS

**LEGEND**

- (D1) PARTIALLY DEMO WALLS TO THE EXTENT INDICATED. SALVAGE WAINTSCOT.
- (D2) TYPE 1 PEWS: (2) 9'-10" SINGLE PEW END, REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D3) TYPE 2 PEWS: (4) 9'-10" DOUBLE PEW END, REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D4) TYPE 3 PEWS: (4) 12'-2" REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D5) TYPE 4 PEWS: (33) 14'-1" REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION. SEE NOTE 2
- (D6) TYPE 5 PEWS: (5) 20'-0" REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION. SEE NOTE 2
- (D7) TYPE 6 PEWS: (4) 14'-11" AT BALCONY, REMOVE, CLEAN, MODIFY AND REFINISH SEE NOTE 3
- (D8) ELDER / DEACON SEATING: (1) 14'-11". REMOVE, CLEAN AND DELIVER TO OWNER.
- (D9) DEACON SEATING: (1) 9'-0". REMOVE, CLEAN AND DELIVER TO OWNER.
- (D10) DEACON SEAT IN CHANCEL: (6) 29" W x 21" D. REMOVE, CLEAN AND DELIVER TO OWNER.
- (D11) REMOVE FRONT STEPS TO CHANCEL.
- (D12) PROTECT FLOORING.
- (D13) REMOVE DOOR & FRAME, REMOVE WAINTSCOT.
- (D14) PARTIALLY REMOVE WAINTSCOT, CLEAN AND SALVAGE FOR REUSE AT RECONFIGURED DOOR.
- (D15) REMOVE DOOR AND DOOR HARDWARE, CLEAN, REFINISH AND SALVAGE FOR REINSTALLATION.
- (D16) REMOVE ALTAR PLATFORM, INSPECT FLOOR UNDERNEATH AND PREPARE FOR ORGAN INSTALLATION. SEE ORGAN REQUIREMENTS.
- (D17) REMOVE CHOIR PLATFORM, INSPECT FLOOR AND REPAIR AS NECESSARY. INSPECT WAINTSCOT TO VERIFY CONTINUITY BEHIND CHORAL Platform AND RECONFIGURE NECESSARY TO MATCH EXISTING. REMOVE ALTAR WAINTSCOT, CLEAN AND SALVAGE FOR REUSE.
- (D18) KNEE FIXTURES REBUILD, REWIRE, RELAMP, REINSTALL IN EXIST. LOCATION - SEE SCHEDULE FOR EXIST. LIGHT FIXTURE & SALVAGE.
- (D19) FOR OWNER: REMOVE ALL EXISTING TRACK LIGHTS AND CONDUIT RUNS.
- (D20) REMOVE ALTA AND MILLWORK ASSOCIATED.
- (D21) TRIM FINIALS, CLEAN AND SALVAGE FOR REUSE.
- (D22) REMOVE KNEE WALL ENCLOSING CHOIR. PROTECT EXISTING WAINTSCOT.
- (D23) REMOVE LECTERN AND SALVAGE.
- (D24) TO BE RELOCATED.
- (D25) REMOVE PULPIT, CLEAN AND SALVAGE FOR RECONFIGURATION.
- (D26) REMOVE BAPTISMAL FONT, SALVAGE FOR REFINISH AND RELOCATION.
- (D27) REMOVE ALTAR, CLEAN AND SALVAGE FOR RELOCATION.
- (D28) REMOVE PIANO AND DELIVER TO OWNER.
- (D29) REMOVE ORGAN CONSOLE.
- (D30) REMOVE SOUND CONTROL - ALTERNATE EXISTING LIGHT FIXTURE TO REMAIN - BASE BID.
- (D31) REMOVE EXIST. FINISHES IN OPENINGS TO BE REPLACED AND REFINISHED.

**ORGAN INFRASTRUCTURE DEMOLITION PACKAGE**

- (D1) ENLARGE OPENING IN BLOWER ROOM FLOOR TO ALLOW FOR THE REMOVAL AND INSTALLATION OF THE EXISTING BLOWER.
- (D2) REMOVE EXISTING HVAC DUCTWORK AT REAR OF CHANCEL.
- (D3) REMOVE HVAC UNIT TO ALLOW FOR WIND LINE PIPES FROM ORGAN BLOWER TO ORGAN.
- (D4) CREATE OPENING IN WALLS AS REQUIRED FOR 15" AND 3" WIND LINE PIPES FROM ORGAN BLOWER TO ORGAN.
- (D5) REMOVE FLOORING AS REQUIRED TO INSTALL ORGAN STRUCTURAL SUPPORTS. SALVAGE FLOOR FOR REINSTALLATION IN DISTURBED AREAS OUTSIDE ORGAN LIMITS. PROVIDE TEMP SHORING FOR EXIST FRAMING AS REQUIRED. SEE STRUCTURAL.

NOTES FOR DEMOLITION:

- 1) DO NOT STRIP PEWS FOR REFINISHING.
- 2) VERIFY THE NUMBER OF PEWS TYPE 4 TO BE RELOCATED PRIOR TO REFINISHING.
- 3) BALCONY PEWS RECONFIGURATION: REDUCE LENGTH TO 11'-0", REINSTALL PEW ENDS AT BOTH SIDES, REFINISH AND SALVAGE FOR REINSTALLATION.
- 4) ALL LITURGICAL FURNITURE MUST BE REMOVED, CLEANED AND SALVAGED FOR MODIFICATIONS FROM OWNER'S FURNITURE CONTRACTOR.

LEGEND

	DEMOLITION
	EXISTING WALLS

LEGEND

DEMOLITION

- (D1) PARTIALLY DEMO WALLS TO THE EXTENT INDICATED. SALVAGE WAINTSCOT.
- (D2) TYPE 1 PEWS: (2) 9'-10" SINGLE PEW END, REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D3) TYPE 2 PEWS: (4) 9'-10" DOUBLE PEW END, REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D4) TYPE 3 PEWS: (4) 12'-2" REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D5) TYPE 4 PEWS: (33) 14'-1" REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION. SEE NOTE 2.
- (D6) TYPE 5 PEWS: (5) 20'-0" REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION. SEE NOTE 2.
- (D7) TYPE 6 PEWS: (4) 14'-11" AT BALCONY, REMOVE, CLEAN, MODIFY AND REFINISH. SEE NOTE 3.
- (D8) ELDER/DEACON SEATING: (1) 14'-11". REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D9) DEACON SEATING: (1) 10'-0". REMOVE, CLEAN, REFINISH AND SALVAGE FOR RELOCATION.
- (D10) DEACON SEATS IN CHANCEL: (6) 29" W x 21" D. REMOVE, CLEAN AND DELIVER TO OWNER.
- (D11) REMOVE FRONT STEPS TO CHANCEL.
- (D12) PROTECT FLOORING.
- (D13) REMOVE DOOR & FRAME, REMOVE WAINTSCOT.
- (D14) FROM DOOR, CLEAN AND SALVAGE FOR REUSE.
- (D15) PARTIALLY REMOVE WAINTSCOT, CLEAN AND SALVAGE FOR REUSE AT RECONFIGURED DOOR.
- (D16) REMOVE DOOR AND DOOR HARDWARE, CLEAN, REFINISH AND SALVAGE FOR REINSTALLATION.
- (D17) REMOVE ALTAR PLATEFORM, INSPECT FLOOR UNDERNEATH AND PREPARE FOR ORGAN INSTALLATION. SEE ORGAN REQUIREMENTS.
- (D18) REMOVE CHOIR PLATEFORM, INSPECT FLOOR AND REPAIR AS NECESSARY, INSPECT WAINTSCOT TO VERIFY CONTINUITY BEHIND CHOIR PLATEFORM AND RECONFIGURE AS NECESSARY TO MATCH EXISTING.
- (D19) REMOVE ALTAR, WAINTSCOT, CLEAN AND SALVAGE FOR REUSE.
- (D20) RECONFIGURE EXIST. LOCATION-SEE SCHEDULE.
- (D21) RELOCATE EXIST. LIGHT FIXTURE & SALVAGE FOR OWNER.
- (D22) REMOVE ALL EXISTING TRACK LIGHTS AND CONDUIT RUNS.
- (D23) REMOVE ALTAR AND MILLWORK ASSOCIATED.
- (D24) TRIM, FINALS, CLEAN AND SALVAGE FOR REUSE.
- (D25) REMOVE KNEE WALL ENCLOSING CHOIR.
- (D26) PROTECT EXISTING WAINTSCOT.
- (D27) REMOVE LECTERN AND SALVAGE.
- (D28) TO BE RELOCATED.
- (D29) REMOVE PULPIT, CLEAN AND SALVAGE FOR RECONFIGURATION.
- (D30) REMOVE BAPTISMAL FONT, SALVAGE FOR REFINISH AND RELOCATION.
- (D31) REMOVE ALTAR, CLEAN AND SALVAGE FOR RELOCATION.
- (D32) REMOVE PIANO AND DELIVER TO OWNER.
- (D33) REMOVE PIANO AND SALVAGE FOR RELOCATION.
- (D34) REMOVE ORGAN CONSOLE.
- (D35) REMOVE SOUND CONTROL - ALTERNATE EXISTING LIGHT FIXTURE TO REMAIN BASE BID.
- (D36) REMOVE EXIST. FINISHES IN OPENINGS TO BE REPLACED AND REFINISHED.

ORGAN INFRASTRUCTURE DEMOLITION PACKAGE

- (D1) ENLARGE OPENING IN BLOWER ROOM FLOOR TO ALLOW FOR THE REMOVAL AND INSTALLATION OF THE EXISTING BLOWER.
- (D2) REMOVE EXISTING HVAC DUCTWORK AT REAR OF CHANCEL.
- (D3) REMOVE HVAC UNIT TO ALLOW FOR WIND LINE PIPES FROM ORGAN BLOWER TO ORGAN.
- (D4) CREATE OPENING IN WALLS AS REQUIRED FOR 15' AND 3' WIND LINE PIPES FROM ORGAN BLOWER TO ORGAN.
- (D5) REMOVE FLOORING AS REQUIRED TO INSTALL ORGAN STRUCTURAL SUPPORTS. SALVAGE FLOOR FOR REINSTALLATION IN DISTURBED AREAS OUTSIDE ORGAN LIMITS. PROVIDE TEMP SHORING FOR EXIST FRAMING AS REQUIRED. SEE STRUCTURAL.

NOTES FOR DEMOLITION

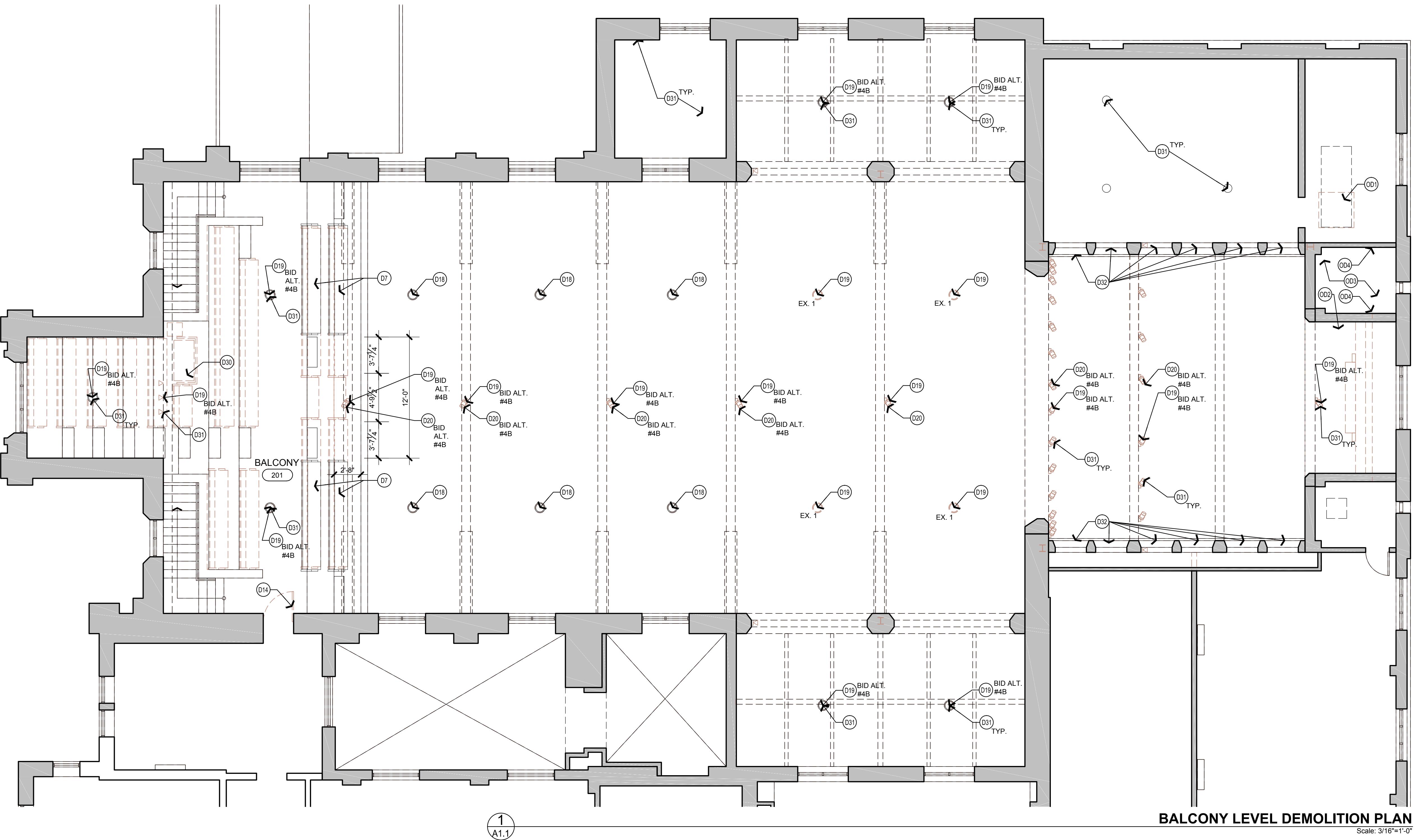
- 1 DO NOT STRIP PEWS FOR REFINISHING
- 2 VERIFY THE NUMBER OF PEWS TYPE 4 TO BE RELOCATED PRIOR TO REFINISHING
- 3 BALCONY PEWS RECONFIGURATION: REDUCE LENGTH TO 11'-0", REINSTALL PEW ENDS AT BOTH SIDES, REFINISH AND SALVAGE FOR REINSTALLATION
- 4 ALL LITURGICAL FURNITURE MUST BE REMOVED, CLEANED AND SALVAGED FOR MODIFICATIONS FROM OWNER'S FURNITURE CONTRACTOR

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DEMOLITION BALCONY LEVEL

DRAWING NO.  
**A1.1**





## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

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CHURCH MAIN LEVEL PLAN

DRAWING NO.  
**A2.0**

KGA PROJECT NO. 1103.03

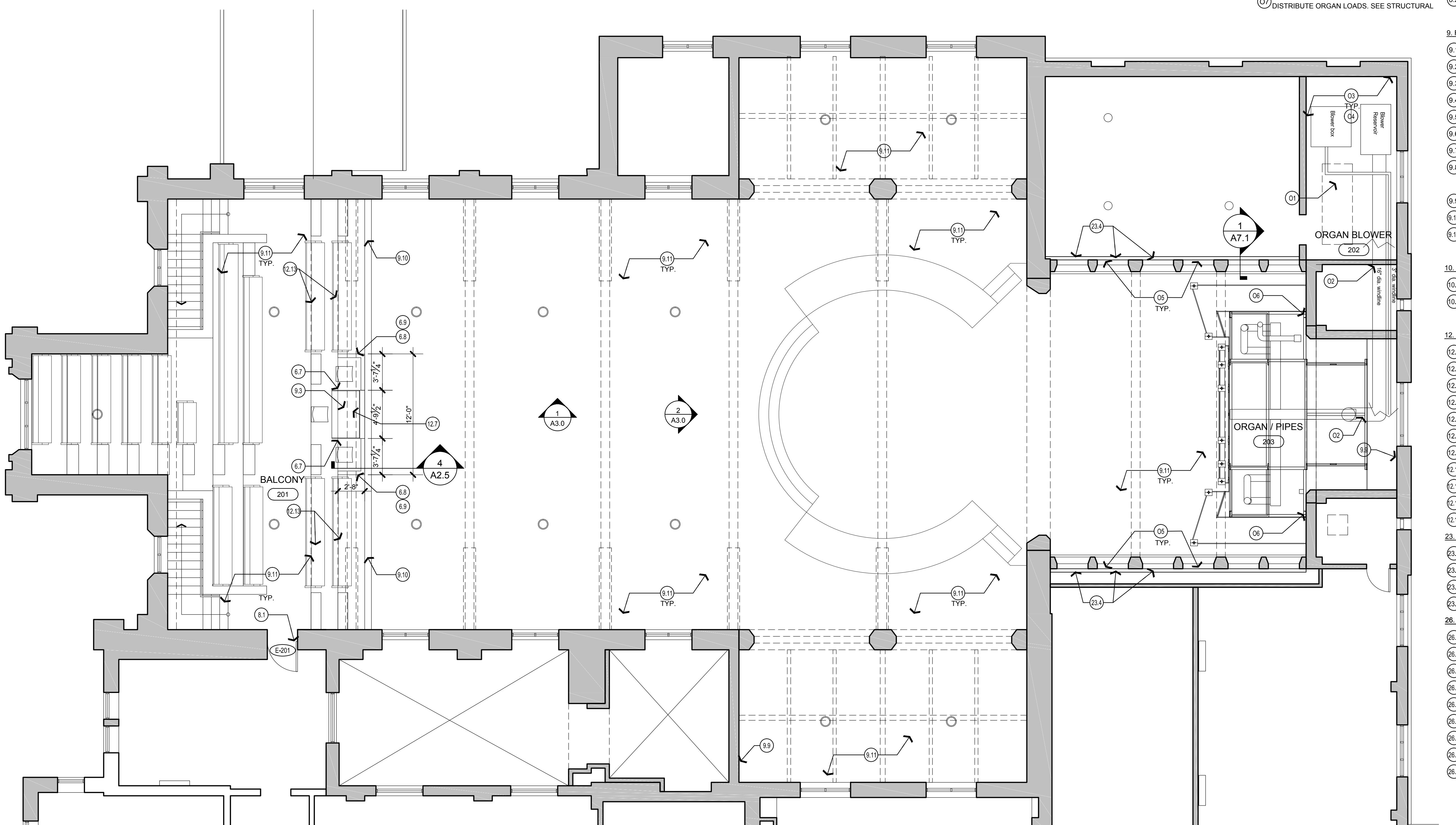
### LEGEND

- 5. METALS**
  - 5.1 PTD MTL. HANDRAIL ALTERNATE: BRONZE HAND RAILS
- 6. WOOD, PLASTICS, AND COMPOSITES**
  - 6.1 WD CHANCEL EXTENSION
  - 6.2 WD STEPS TO CHANCEL
  - 6.3 HC WD RAMP
  - 6.4 DEMOUNTABLE ELEVATED CHOIR
  - 6.5 ORGAN WAINSCOT PANELING BY ORGAN MANUF.
  - 6.6 INSPECT WAINSCOT BEHIND THE REMOVED CHOIR PLATFORM TO VERIFY CONTINUITY OF WAINSCOT CONFIGURATION. RECONFIGURE AS NECESSARY TO MATCH EXISTING FINISHES
  - 6.7 WD FLOOR EXTENSION FOR A/V CONTROL CONSOLE
  - 6.8 WD VENEER ON WD STUDS WALL ENCLOSURE FOR A/V CONTROL. PLYWOOD SPECIES. VENEER CUT AND STAIN TO MATCH EXISTING FINISHES
  - 6.9 REINSTALL SALVAGED WAINSCOT FROM ALTAR AT THE EXTERIOR FACE OF A/V CONTROL WALL ENCLOSURE. REFINISH TO MATCH EXISTING FINISHES
- 8. DOORS & WINDOWS**
  - 8.1 REINSTALL EXIST WD DOOR TO SWING IN THE OPPOSITE DIRECTION. REPLACE HINGES. PROVIDE NEW JAMB AS REQUIRED. WD SPECIES AND FINISH TO MATCH EXISTING. MODIFY THRESHOLD AS REQUIRED
  - 8.2 REPLACE WD DOOR. INCREASE WIDTH TO THE ADJACENT WAINSCOT PANEL. VERIFY DIMENSIONS IN FIELD. SALVAGE WAINSCOT FROM EXISTING DOOR AND REINSTALL ON NEW DOOR.
- 9. FINISHES**
  - 9.1 REFINISH EXIST WD FLOORING
  - 9.2 STRIP, CLEAN AND REFINISH STONE FLOOR
  - 9.3 WD FLOORING. SPECIES AND FINISH T.M.E.
  - 9.4 LINOLEUM FLOOR ON TOP OF EXIST FLOORING
  - 9.5 REFINISH WAINSCOT
  - 9.6 REFINISH DOORS
  - 9.7 REFINISH WD & GLASS PARTITION AND DOORS ASSOCIATED
  - 9.8 CLEAN CEMENTITIOUS PLASTER AND STONE TRIM AT WALLS ALTERNATE: RESEAL CEMENTITIOUS PLASTER WITH OPAQUE STAIN TO ESTABLISH CONSISTENT APPEARANCE
  - 9.9 REPAIR DAMAGED AREAS OF CEMENTITIOUS PLASTER AT WALLS AND AROUND AIR GRILLES
  - 9.10 REFINISH BALCONY FRONT GUARD RAIL AND WD CEILING UNDER BALCONY
  - 9.11 ALTERNATE: REPAIR, CLEAN AND REFINISH WOOD AT CEILING AT WORSHIP SPACE, INCLUDING VENEER TRUSSES, PURLINS, SPACERS, BRACKETS, DECK AND ALL OTHER WOOD TRIM
- 10. SPECIALTIES**
  - 10.1 DEMOUNTABLE WD SCREEN WALL. ALTERNATE
  - 10.2 FUTURE FLOOR RISING PROJECTION SCREEN. PROVIDE AV/ELEC CONNECTION AND COVERED FLOOR OPENING FOR FUTURE INSTALLATION
- 12. FURNISHINGS**
  - 12.3 LITURGICAL FURNITURE, N.I.C.
  - 12.4 SEATING, N.I.C.
  - 12.5 RELOCATED PIANO
  - 12.6 ORGAN CONSOLE
  - 12.7 AV ROLLTOP CONTROL DESK. ALTERNATE
  - 12.8 RELOCATED TYPE 1 PEWS
  - 12.9 RELOCATED TYPE 2 PEWS
  - 12.10 RELOCATED TYPE 3 PEWS
  - 12.11 RELOCATED TYPE 4 PEWS
  - 12.12 RELOCATED TYPE 5 PEWS
  - 12.13 MODIFIED TYPE 6 PEWS
- 23. HVAC**
  - 23.1 HVAC GRILL AT STEP AND SIDE OF RAISED SANCTUARY. SEE MECHANICAL
  - 23.2 HVAC RETURN GRILLES AT WAINSCOT. SEE MECHANICAL
  - 23.3 HVAC RETURN GRILLES AT FLOOR. SEE MECHANICAL
  - 23.4 HVAC SUPPLY GRILL. SEE MECHANICAL
- 26. ELECTRICAL**
  - 26.1 EXIST. LIGHT FIXTURE TO REMAIN, RELAMP, CLEAN - SEE FIXTURE SCHED.
  - 26.2 CEILING MTD. PENDANT FIXTURE
  - 26.3 12' Ø CHANDELIER W/ UP & DN LIGHTS
  - 26.4 TRACK LIGHTS, TYP.
  - 26.5 TRACK LIGHTS W/ MULTI-CIRCUITS, TYP.
  - 26.6 UP LIGHT, TYP.
  - 26.7 AV / ELEC / ORGAN FLOOR BOX. SEE AV AND ELECTRICAL
  - 26.8 SURFACE MTD. PENDANT FIXTURE
  - 26.9 ADD CIRCUITS TO EXIST. ELEC PANELS TO ACCOMMODATE OUTLETS, LIGHT FIXTURES AND ORGAN EQUIPMENT
  - 26.10 LIGHTING ON / OFF SWITCHES
  - 26.11 LIGHTING REMOTE CONTROLS
  - 26.12 LIGHTING MASTER CONTROLLER
  - 26.13 WIRELESS SENSORS AT TRUSSES, AS REQUIRED FOR LIGHTING FIXTURES

### MAIN LEVEL PLAN

Scale: 3/16"=1'-0"

1  
A2.0



LEGEND

- 5. METALS
  - 5.1 PTID MTL. HANDRAIL ALTERNATE: BRONZE HAND RAILS
- 6. WOOD, PLASTICS, AND COMPOSITES
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  - 6.9 REINSTALL SALVAGED WAINSCOT FROM ALTAR AT THE EXTERIOR FACE OF A/V CONTROL WALL ENCLOSURE. REFINISH TO MATCH EXISTING FINISHES
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  - 26.5 TRACK LIGHTS W/ MULTI-CIRCUITS, TYP.
  - 26.6 UP LIGHT, TYP.
  - 26.7 A/V / ELEC / ORGAN FLOOR BOX. SEE AV AND ELECTRICAL
  - 26.8 SURFACE MTD. PENDANT FIXTURE
  - 26.9 ADD CIRCUITS TO EXIST. ELEC PANELS TO ACCOMMODATE OUTLETS, LIGHT FIXTURES AND ORGAN EQUIPMENT ALTERNATE: REMOVE AND REPLACE ELECTRICAL PANELS, BRANCH CIRCUITS AND WIRING SERVING WORSHIP SPACE
  - 26.10 LIGHTING ON / OFF SWITCHES
  - 26.11 LIGHTING REMOTE CONTROLS
  - 26.12 LIGHTING MASTER CONTROLLER
  - 26.13 WIRELESS SENSORS AT TRUSSES, AS REQUIRED FOR LIGHTING FIXTURES

O W N E R  
FIRST PRESBYTERIAN CHURCH  
40 CHURCH STREET  
ASHEVILLE, NC 28801  
828.253.1431 FAX 828.253.3192

S T R U C T U R A L   E N G I N E E R  
KLOESEL ENGINEERING  
8 MAGNOLIA AVENUE, SUITE 100  
ASHEVILLE, NORTH CAROLINA 28801  
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TILDEN WHITE & ASSOC.  
351 MERRIMON AVENUE,  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.255.4327

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MILLER, BEAM & PAGANELLI, INC.  
12040 SOUTH LAKES DRIVE, SUITE 104  
RESTON, VIRGINIA 20191 TEL  
703.506.0005 FAX 703.506.0009

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HARTRANT LIGHTING DESIGN  
214 WEST TREMONT AVENUE  
SUITE 500, CHARLOTTE, NC 28203  
TEL 240.731.1058



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

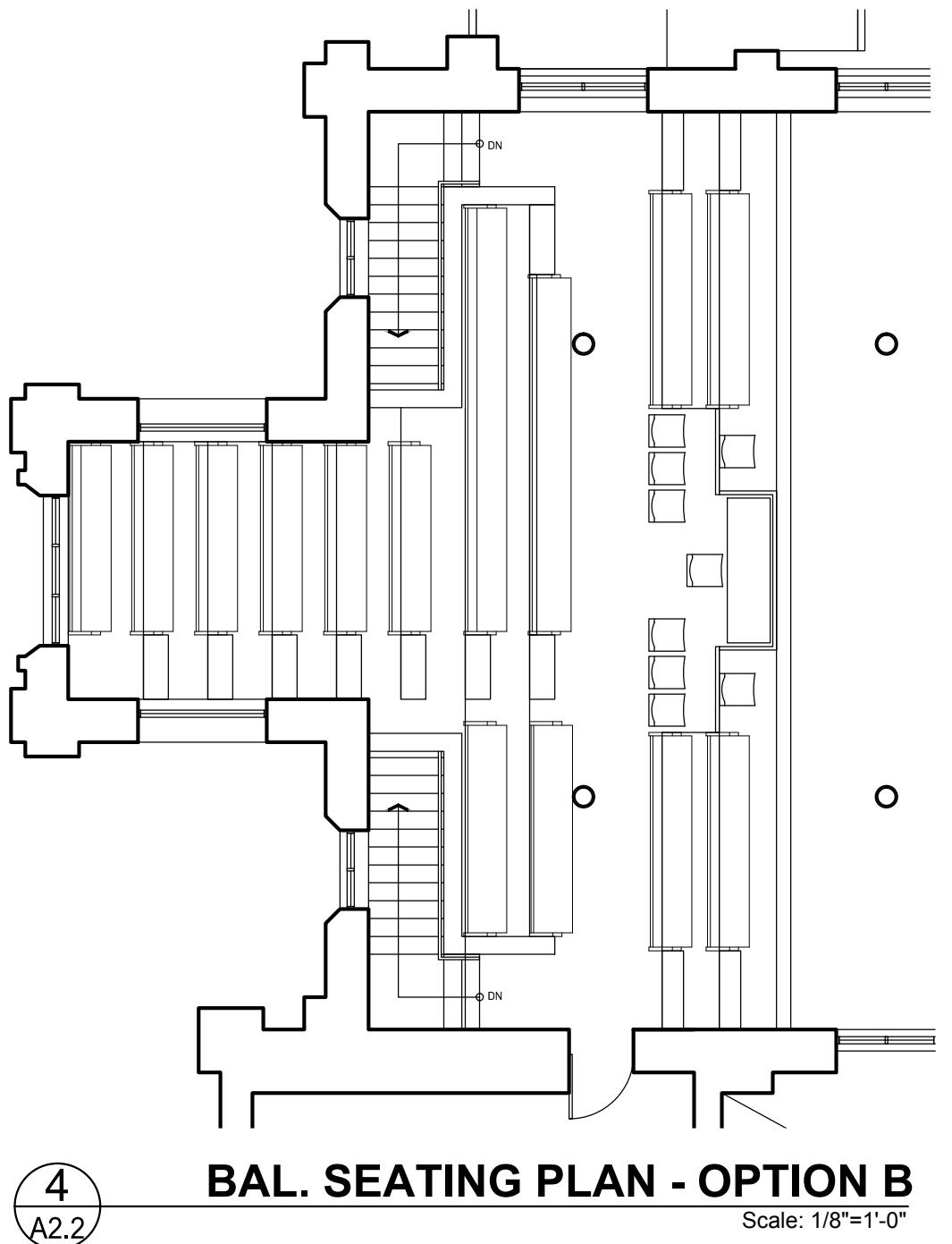
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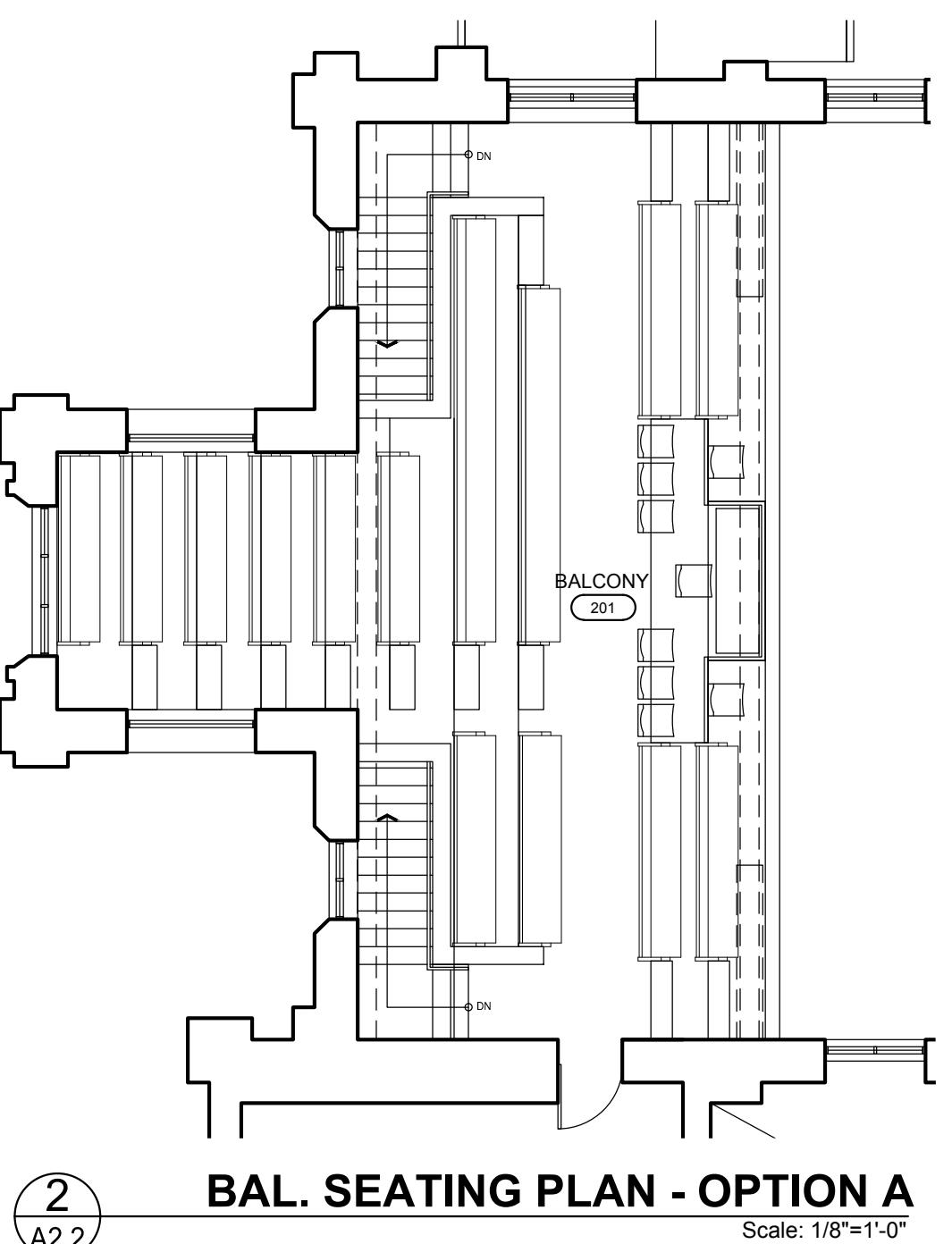
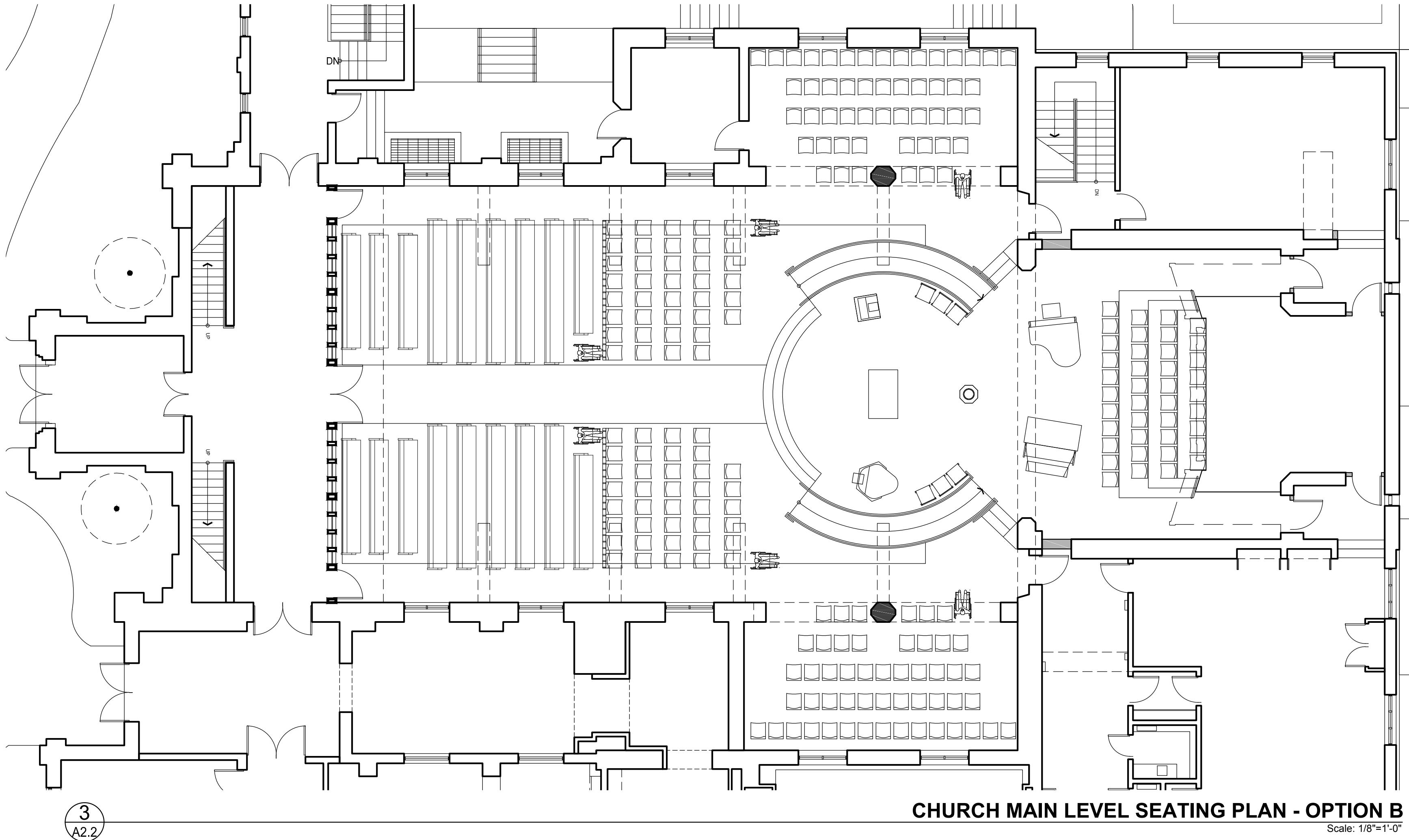
BALCONY LEVEL PLAN

DRAWING NO.  
**A2.1**

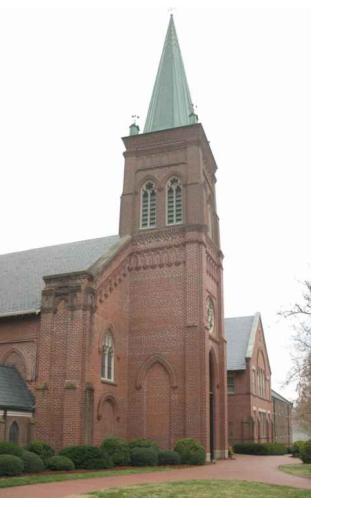
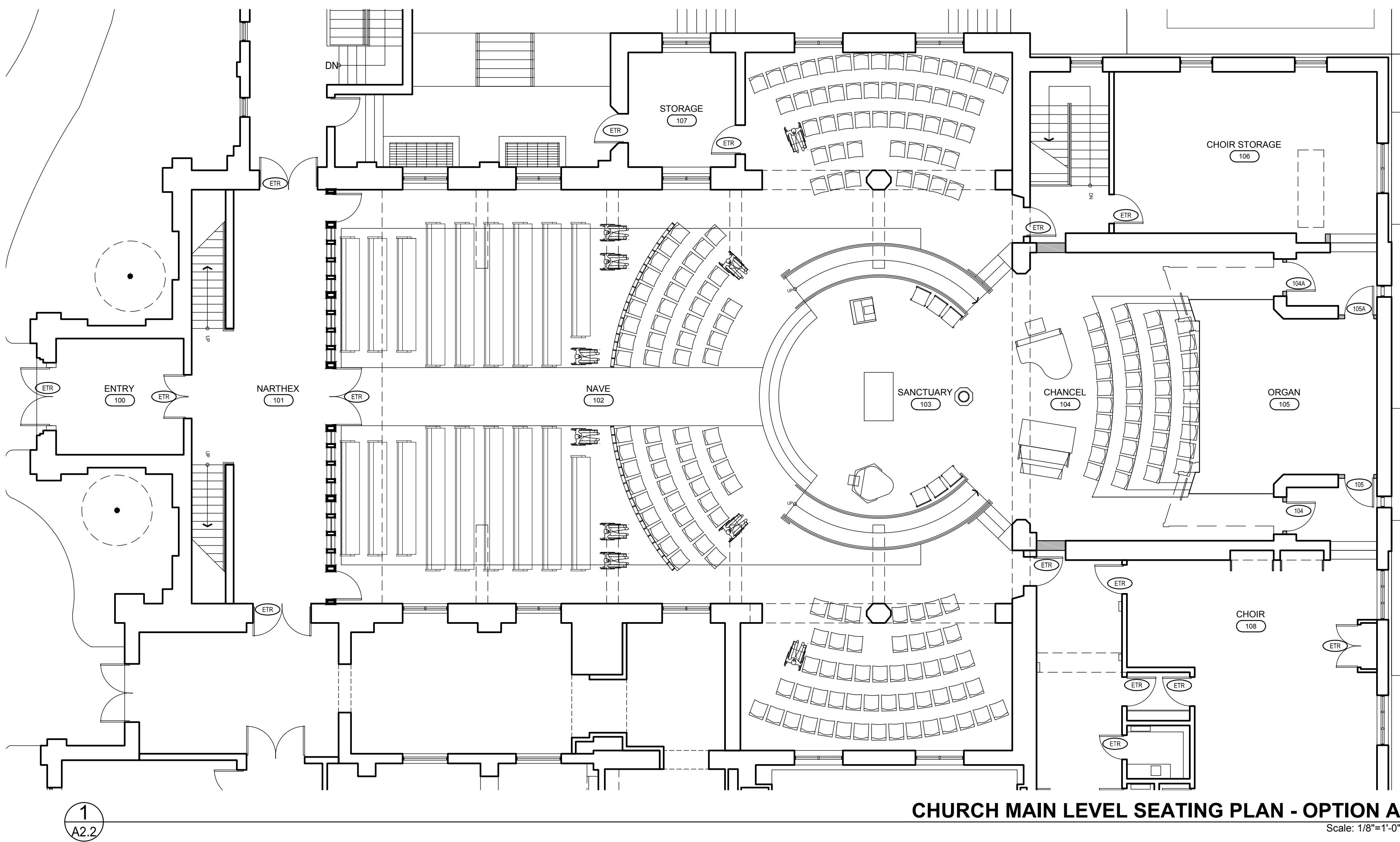
KGA PROJECT NO. 1103.03



BALCONY SEATING COUNT OPT. B		SANCTUARY SEATING COUNT OPT. B	
CHAIRS	8	CHAIRS	222
HC	0	HC	8
PEWS		PEWS	
@ 18"	102	@ 18"	140
TOTAL	110	TOTAL	370
@ 21"	80	@ 21"	112
TOTAL	88	TOTAL	342



BALCONY SEATING COUNT OPT. B		SANCTUARY SEATING COUNT OPT. A	
CHAIRS	8	CHAIRS	198
HC	0	HC	10
PEWS		PEWS	
@ 18"	102	@ 18"	164
TOTAL	110	TOTAL	372
@ 21"	80	@ 21"	128
TOTAL	88	TOTAL	336



**FIRST  
PRESBYTERIAN CHURCH  
SANCTUARY RENOVATION**

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

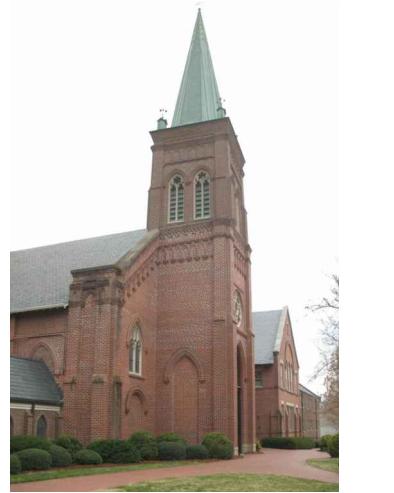
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SEATING PLANS

DRAWING NO.

**A2.2**



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
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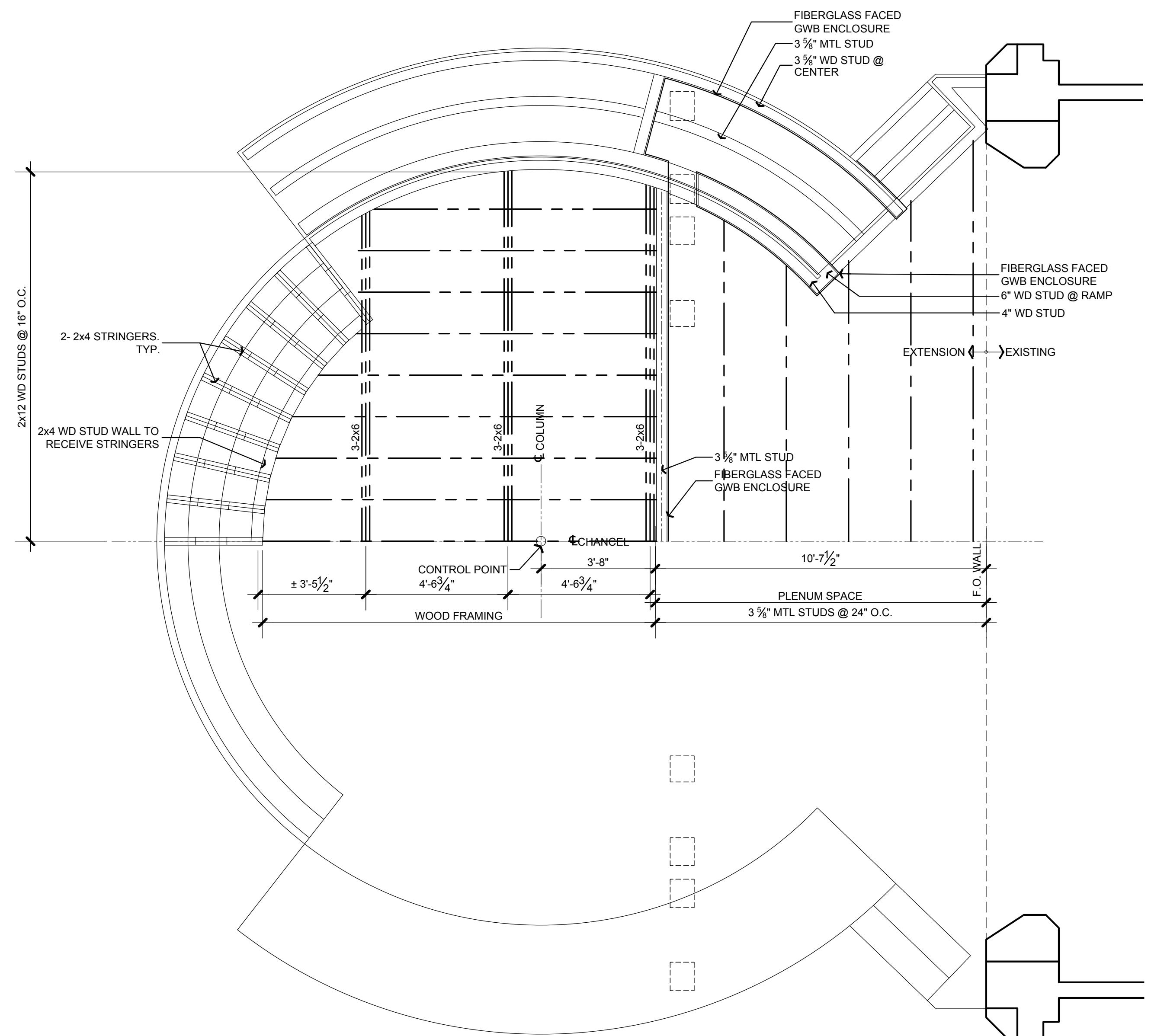
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ENLARGED FLOOR PLANS

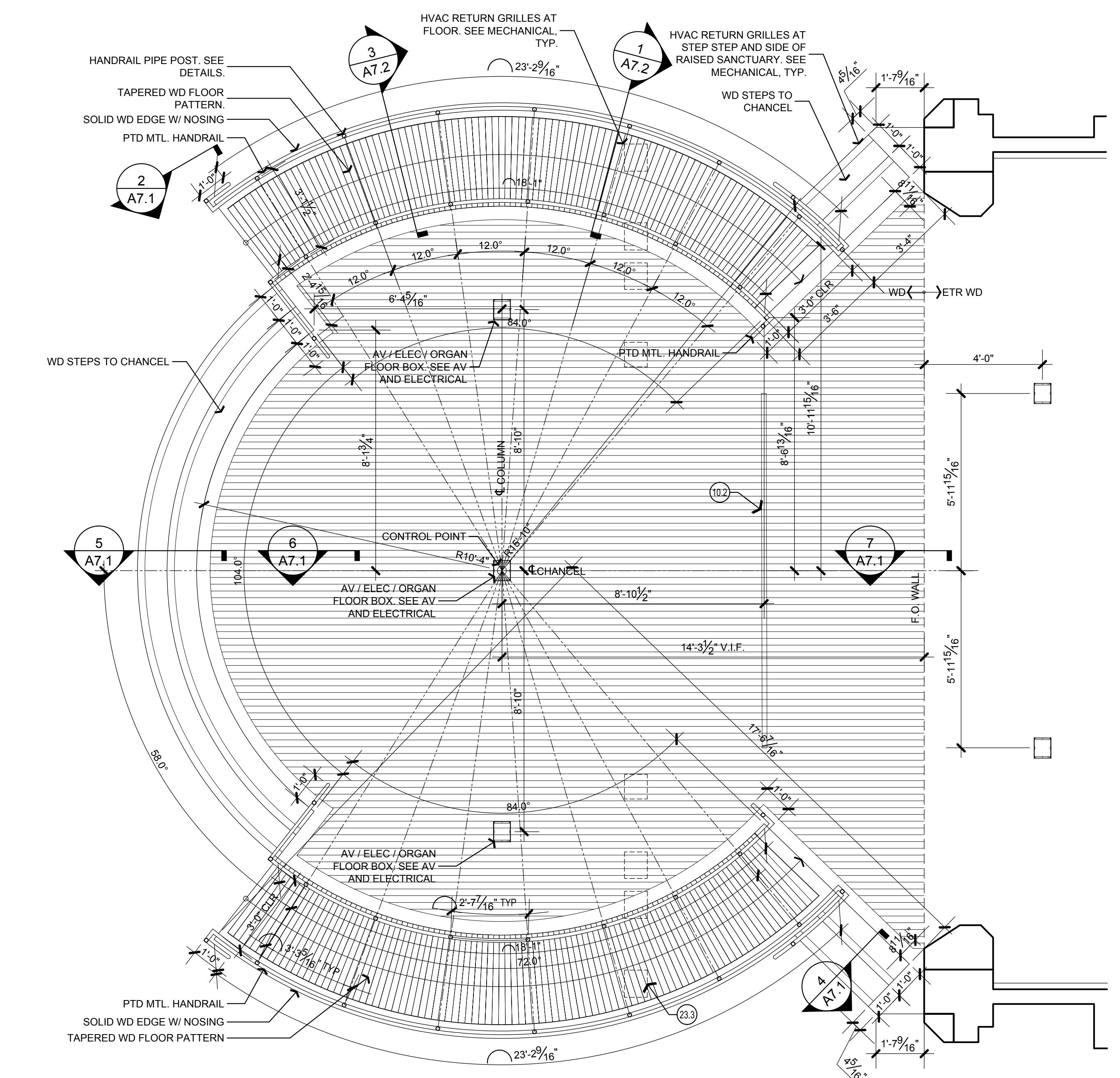
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A2.3

KGA PROJECT NO. 1103.03



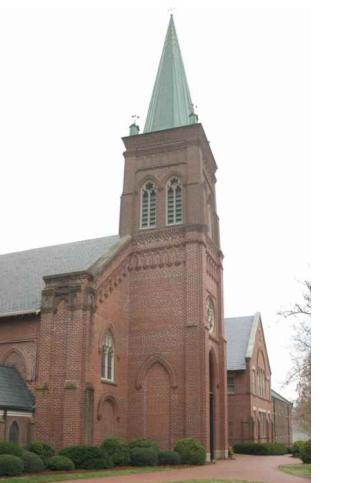
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A2.3



(1)  
A2.3

DRAWING NO.  
A2.3

KGA PROJECT NO. 1103.03



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

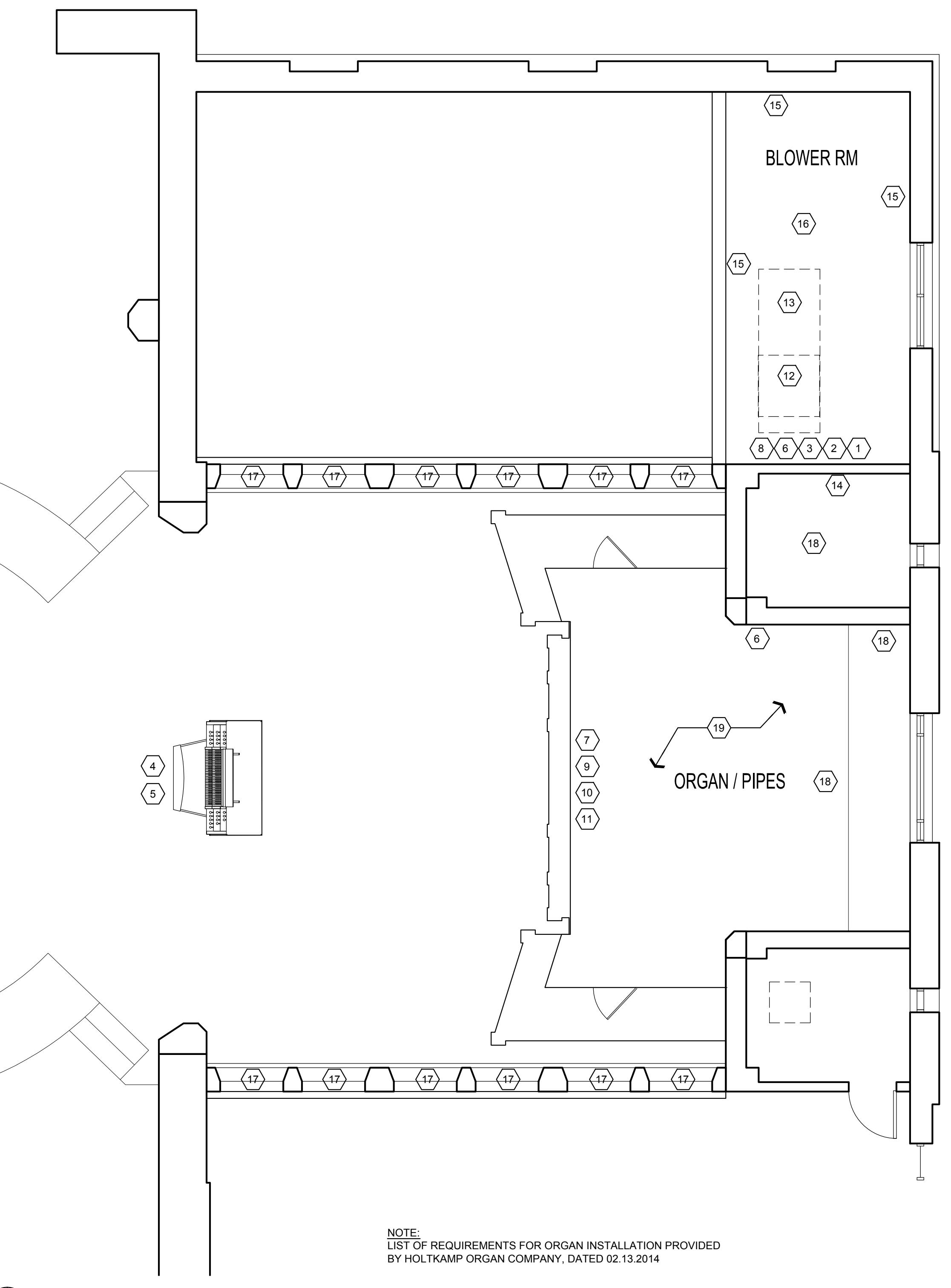
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### ORGAN REQUIREMENTS

DRAWING NO.  
**A2.4**

KGA PROJECT NO. 1103.03



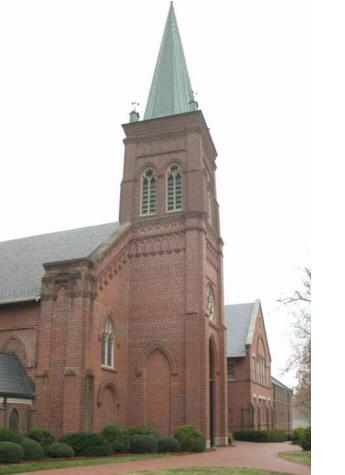
1  
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### ORGAN PREPARATION REQUIREMENTS

Scale: 1/4"=1'-0"

1. THE CHANCEL ORGAN BLOWER WILL BE LOCATED IN THE BLOWER ROOM FOR THE EXISTING ORGAN. SAID LOCATION TO HOUSE PRIMARY ORGAN BREAKER PANEL, ORGAN BLOWER, AND STARTER RELAYS.
2. PROVIDE 220 VOLT CIRCUIT FOR BLOWER. EXACT POWER TO BE PROVIDED BY THE OWNER. CIRCUIT TO INCLUDE SUITABLE STARTER AND DISCONNECT SWITCH FOR 3 H.P. BLOWER MOTOR. BLOWER STARTER COIL TO BE SWITCHED BY "ICE CUBE" RELAY WITH 12 VDC COIL. ORGAN BUILDER WILL CONNECT 12 VDC ORGAN WIRING TO ICE CUBE RELAY COIL. OWNER TO CONNECT STARTER TO ICE CUBE RELAY COIL.
3. PROVIDE 110-VOLT, 20 AMP DEDICATED SERVICE FOR ORGAN RECTIFIERS. RECTIFIERS TO BE LOCATED IN BASE OF ORGAN. SERVICE TO TERMINATE IN DUPLEX RECEPTACLE SWITCHED BY ICE CUBE RELAY WITH 12 VDC COIL REFERENCED IN #2. ORGAN BUILDER WILL CONNECT RECTIFIER TO ICE CUBE RELAY COIL. RECTIFIER WILL BE PROVIDED BY ORGAN BUILDER. STUB IN NOW AND COMPLETE DURING INSTALLATION.
4. NOTE: ITEMS 2 & 3 ARE ALWAYS USED TOGETHER. THEY ARE CONTROLLED BY A COMMON 12 VDC KEYED START/STOP SWITCH LOCATED ON CONSOLE AND PROVIDED BY ORGAN BUILDER. START/STOP SWITCH TO ACTIVATE RELAY FOR ITEMS 2 AND 3.
5. PROVIDE 110-VOLT, 20 AMP UN-SWITCHED SERVICE FOR ORGAN CONSOLE. DATA CABLE AND 110VAC SERVICE FOR ORGAN CONSOLE. PLUG IN LOCATIONS TO BE LOCATED IN RECESSED CANS. CANS TO BE CONNECTED BY TWO 1" CONDUITS. CONDUITS TO TERMINATE IN BLOWER ROOM. STUB IN 110 VAC AND COMPLETE DURING INSTALLATION. LEAVE PULL WIRES IN CONDUIT FOR ORGAN DATA CABLE.
6. PROVIDE ONE 1" CONDUIT FROM BLOWER ROOM TO BASE OF ORGAN FOR ORGAN CONTROL WIRING.
7. PROVIDE TEN WORK LIGHTS INSIDE ORGAN CASE, WITH SWITCH AT ENTRANCE DOOR. LOCATIONS TO BE SPOTTED AT THE TIME OF ORGAN INSTALLATION BY ORGAN INSTALLATION CREW CHIEF. SOME LIGHTS WILL BE FLUORESCENT, AND OTHERS INCANDESCENT. STUB IN NOW AND COMPLETE DURING INSTALLATION.
8. PROVIDE TWO WORK LIGHTS INSIDE CHANCEL BLOWER ROOM, WITH SWITCH AT ENTRANCE DOOR. LOCATIONS TO BE SPOTTED AT THE TIME OF ORGAN INSTALLATION BY ORGAN INSTALLATION CREW CHIEF. SOME LIGHTS WILL BE FLUORESCENT, AND OTHERS INCANDESCENT. STUB IN NOW AND COMPLETE DURING INSTALLATION.
9. PROVIDE TEN UNSWITCHED CONVENIENCE OUTLETS INSIDE ORGAN SPACES. STUB IN NOW AND COMPLETE DURING INSTALLATION.
10. NOTE: ITEMS 7 - 9 ARE ON A SEPARATE CIRCUIT FROM ITEMS 2 AND 3.
11. PROVIDE CONDUIT AND WIRING FOR 6 LOW VOLUME EXHAUST FANS IN ORGAN CASE. FANS PROVIDED AND INSTALLED BY ORGAN BUILDER. FANS TO BE SILENT AND CONSTANTLY RUNNING. STUB IN NOW AND COMPLETE WIRING DURING INSTALLATION.
12. PROVIDE DISPLAY LIGHTING ON DIMMERS TO EVENLY LIGHT THE PIPE ORGAN FACADE.
13. NOTE: ORGAN BUILDER TO PROVIDE AND INSTALL CONSOLE SWITCH, BLOWER MOTOR, AC/DC RECTIFIER, CONSOLE LIGHTS AND SWELL EXHAUST FAN. ALL AC ELECTRICAL WORK IS THE RESPONSIBILITY OF THE OWNER.
14. ENLARGE OPENING IN BLOWER ROOM FLOOR TO ALLOW FOR THE REMOVAL OF THE EXISTING BLOWER.
15. RE-INSTALL ACCESS STAIRS IN BLOWER ROOM AFTER ORGAN INSTALLATION.
16. INSTALL ONE 15" DIAMETER AND ONE 3" DIAMETER PVC WIND LINES FROM BLOWER ROOM TO BASE OF ORGAN CASE.
17. COVER ALL BLOWER ROOM INTERIOR WALL SURFACES AND CEILING WITH ONE LAYER 5/8" GYPSUM BOARD. TAPE ALL JOINTS. PAINT WHITE.
18. PAINT BLOWER ROOM FLOOR GRAY.
19. COVER ALL ORGAN CHAMBER OPENINGS WITH TWO LAYERS OF 3/4" PLYWOOD, FULLY GLUED AND SCREWED. COVERS TO BE APPLIED TO THE INSIDE WALL OF EACH OPENING. OUTSIDE SURFACE OF COVERS TO BE FINISHED WITH A COLOR OR STAIN COMPATIBLE WITH CHANCEL FINISHES.
20. REMOVE EXISTING HVAC DUCTWORK AT REAR OF CHANCEL.
21. PROVIDE ADEQUATE HEATING, COOLING AND HUMIDITY CONTROL THROUGHOUT THE YEAR. TEMPERATURE TO BE HELD WITHIN A RANGE OF 65 - 80 DEGREES. HUMIDITY TO BE HELD WITHIN A RANGE OF 20 - 80%.

NOTE:  
LIST OF REQUIREMENTS FOR ORGAN INSTALLATION PROVIDED  
BY HOLT KAMP ORGAN COMPANY, DATED 02.13.2014



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

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AV PLANS & DETAILS

DRAWING NO.  
**A2.5**

KGA PROJECT NO. 1103.03

### LEGEND

#### DEMOLITION NOTES:

- (D1) REMOVE MAIN SPEAKER AND ASSOCIATED WIRING
- (D2) REMOVE AV CONTROL EQUIPMENT AND DESK, SALVAGE EQUIPMENT FOR RELOCATION

#### 11. EQUIPMENT

- (11.1) AV ORGAN FLOOR BOX W/ DEDICATED 20A QUAD AC POWER OUTLET, FSR FL-540P (6" DEEP) OR EQUAL. INTERCONNECT ALL BOXES WITH (4) 1-1/2" CONDUIT FOR AV, AND (1) 1-1/2" CONDUIT FOR ORGAN CONDUIT TO HOME RUN TO AV CONTROL DESK IN BALCONY (11.5). PROVIDE CONDUIT FOR AC POWER AS REQUIRED.
- (11.2) AV ORGAN FLOOR BOX W/ DEDICATED 20A QUAD AC POWER OUTLET, FSR FL-540P (6" DEEP) OR EQUAL. INTERCONNECT ALL BOXES WITH (4) 1-1/2" CONDUIT FOR AV, AND (1) 1-1/2" CONDUIT FOR ORGAN CONDUIT TO HOME RUN TO AV CONTROL DESK IN BALCONY (11.5). ORGAN CONDUIT TO TERMINATE AS REQUIRED. PROVIDE CONDUIT FOR AC POWER AS REQUIRED.
- (11.3) AV WALL RACK LOCATION. PROVIDE 20A QUAD AC OUTLET AT 60" AFF AND (1) 1-1/2" CONDUIT TO AV CONTROL DESK IN BALCONY (11.5).

- (11.4) FUTURE WALL SWITCH LOCATION FOR PROJECTION SCREEN. PROVIDE 1-GANG JUNCTION BOX AT 48" AFF WITH 1/2" CONDUIT TO FUTURE PROJECTION SCREEN LOCATION (11.9).
- (11.5) RELOCATED AV CONTROL DESK LOCATION. EXTEND ALL AV CABLING FROM EXIST. LOCATION. PROVIDE (2) DEDICATED 20A AND AC OUTLETS.

- (11.6) WALL MTD. SPEAKER BOX AT APPROX. 8' AFF. INTERCONNECT BOTH LOCATIONS WITH 1/2" CONDUIT AND HOME RUN BACK TO AV WALL RACK BEHIND CHANCEL (11.3).
- (11.7) WALL MTD. SPEAKER BOX AT APPROX. 8' AFF. INTERCONNECT BOTH LOCATIONS WITH 1/2" CONDUIT AND HOME RUN BACK TO AV WALL RACK BEHIND CHANCEL (11.3).

- (11.8) EXISTING SPEAKERS TO REMAIN. TERMINATE CONDUITS UNDER DESK, INSTALL ACCESS PANEL.
- (11.9) SPEAKER LOCATION. PROVIDE 1/2" CONDUIT TO AV CONTROL DESK IN BALCONY (11.5).

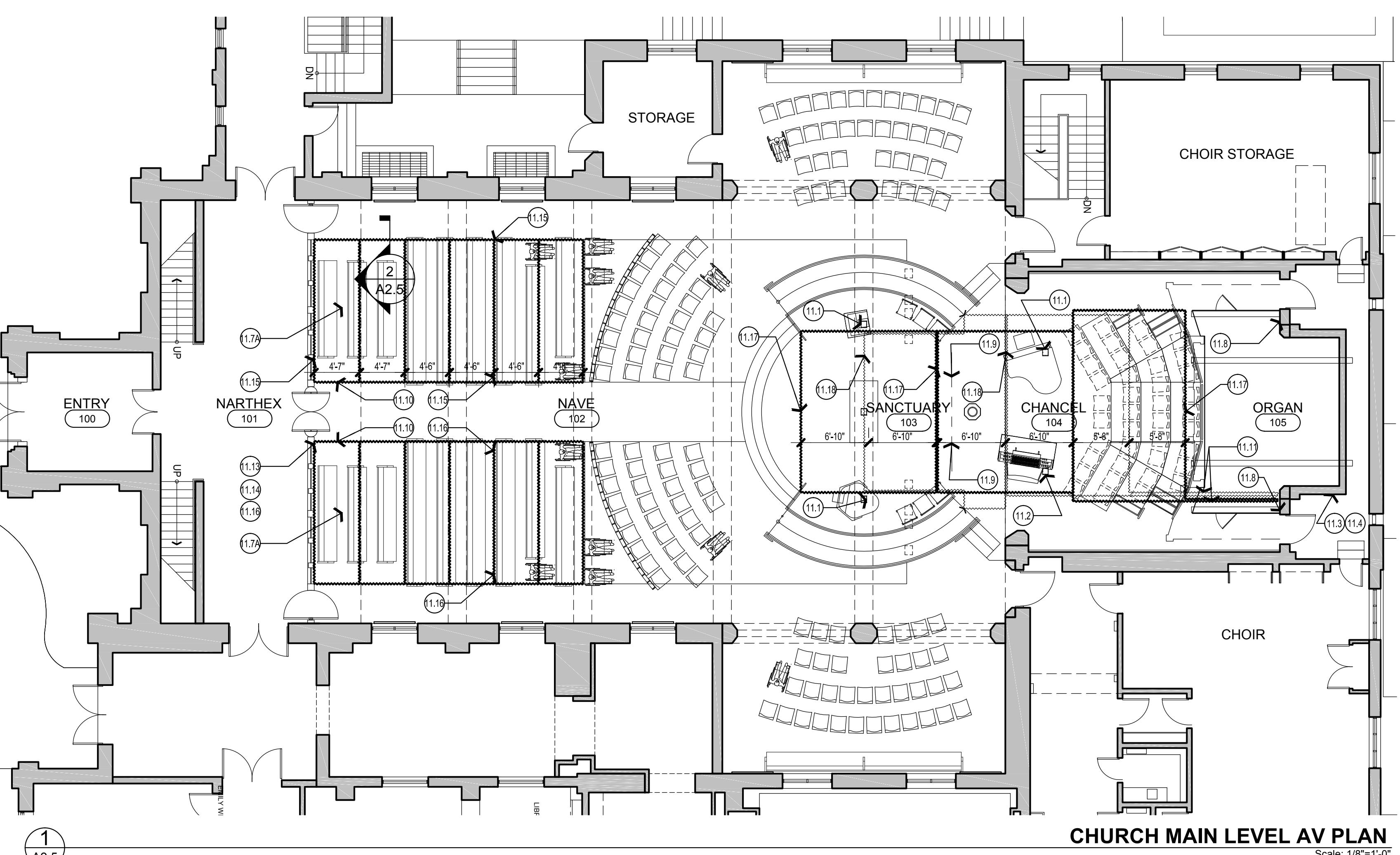
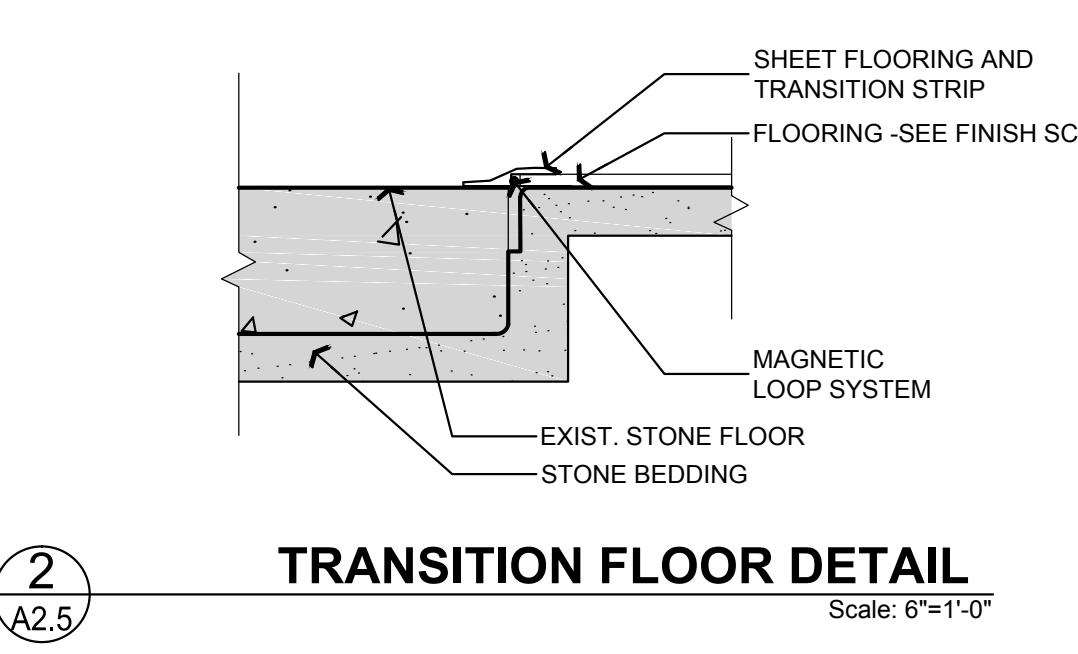
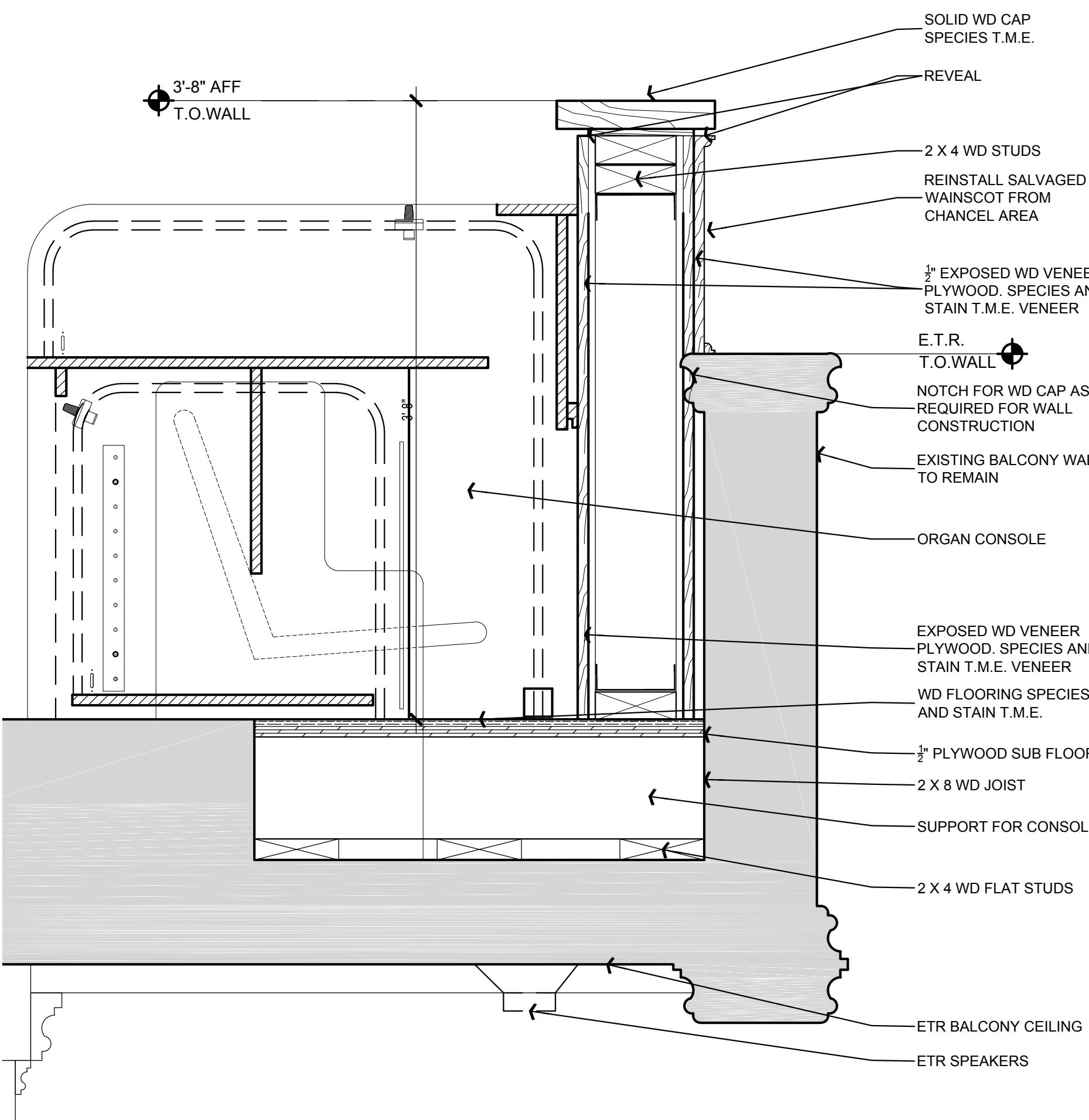
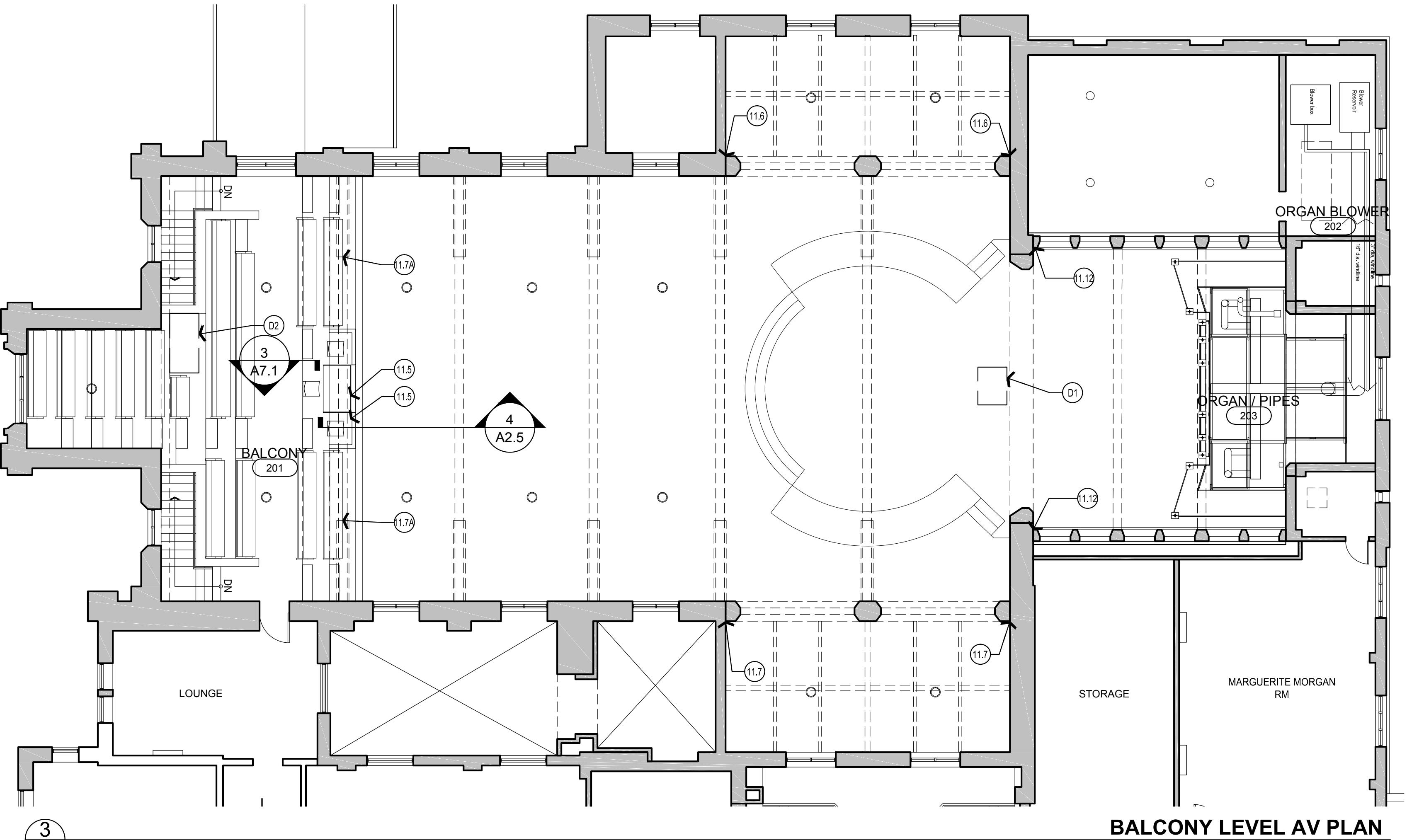
- (11.10) FUTURE FLOOR MTD. PROJECTION SCREEN (BID ALT.) PROVIDE HARD WIRED AC POWER AND 1/2" CONDUIT TO WALL SWITCH LOCATION (11.4).
- (11.11) INDUCTION LOOP WIRING IN FLOOR. WIRING TO HOME RUN TO AV CONTROL DESK IN BALCONY (11.5). PROVIDE 1/2" PLASTIC CONDUIT FROM CONTROL DESK TO START OF LOOP AREA.

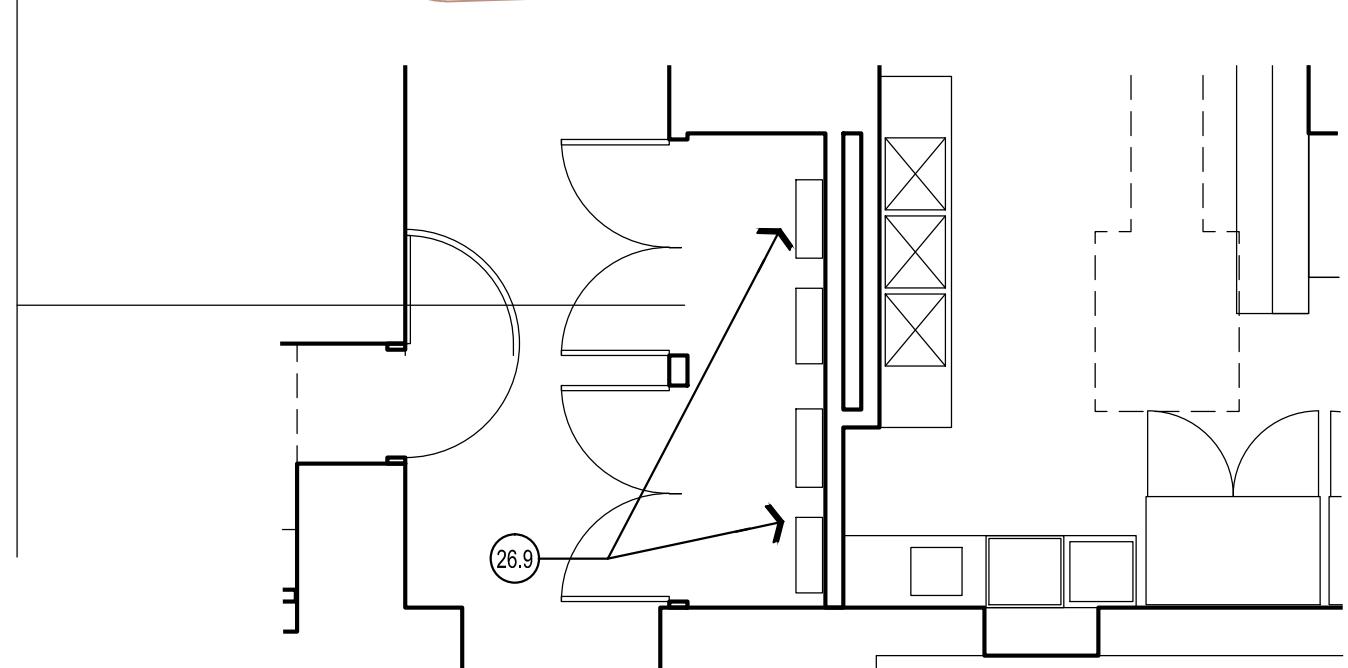
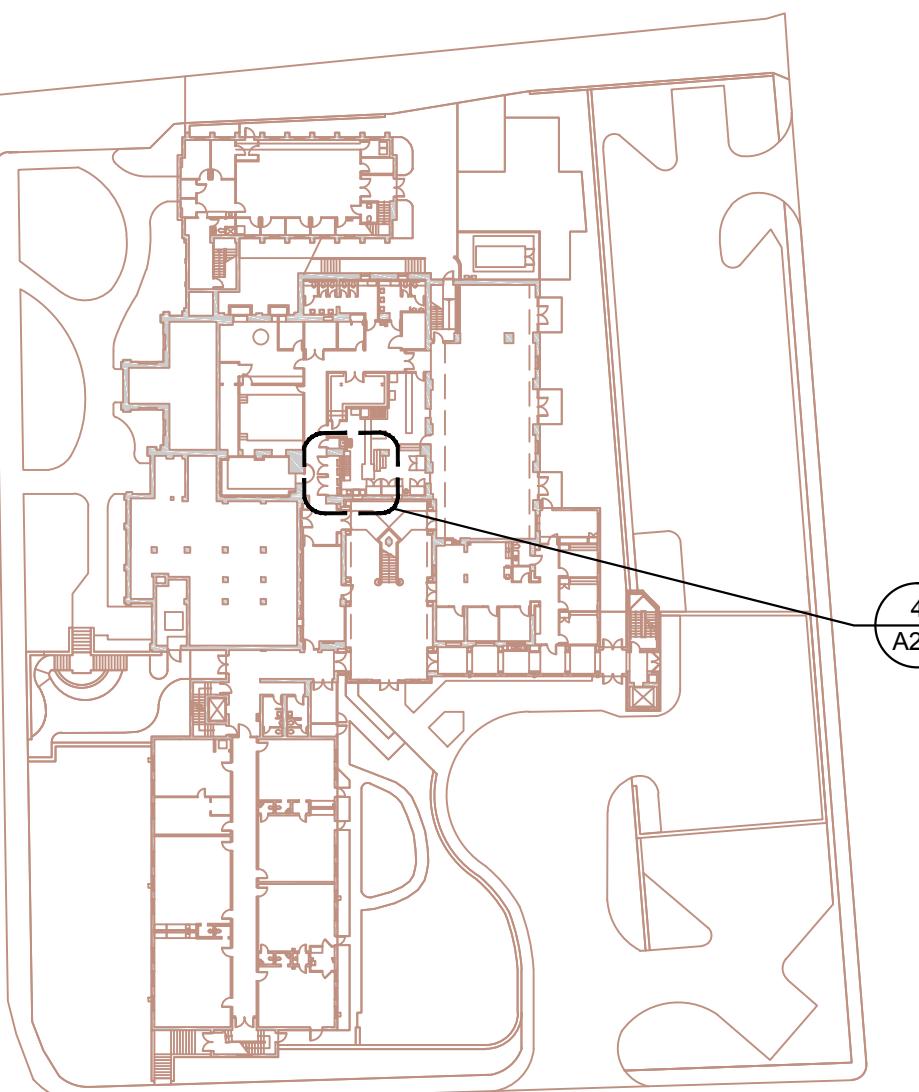
- (11.12) INDUCTION LOOP WIRING IN FLOOR. WIRING TO HOME RUN TO AV WALL RACK BEHIND CHANCEL (11.3). PROVIDE 1/2" PLASTIC CONDUIT FROM WALL RACK TO START OF LOOP AREA.
- (11.13) WALL MTD. SPEAKER BOX AT APPROX. 8' AFF. INTERCONNECT BOTH LOCATIONS WITH 1/2" CONDUIT AND HOME RUN BACK TO AV WALL RACK BEHIND CHANCEL (11.3).

- (11.14) MAGNETIC INDUCTION LOOP WIRE SHALL BE TAPE INSULATED PLACE BEFORE PERMANENT INSTALLATION. TAPE INSULATED WIRE SHALL ACCOUNT FOR METAL OR EHF ANOMALIES. A MAGNETIC INDUCTION FIELD STRENGTH METER SHALL BE USED TO WALK THE ROOM WHILE TEST TONES OF 200Hz, 500Hz, 1kHz AND 2kHz ARE INJECTED INTO LOOP SYSTEM. NO DEVIATION IN ANY FREQUENCY SHALL BE GREATER THAN +3dB IN ANY FREQUENCY TO MILLER BEAM AND PAGANELLI (MP) BEFORE INSTALLATION. NO PORTION OF THE MAGNETIC LOOP WIRE SHALL BE EXPOSED AND/OR VISIBLE. INSTALLATION OF LOOP WIRE SHALL BE BELOW CARPET AND TILE AND AFFIXED WITH WILLIAMS SOUND LOOP TAPE. VERIFY INSTALLATION PROCEDURE AND LOCATIONS WITH MPB BEFORE MT.

- (11.15) LOOP RUN FROM AMPLIFIER TO ROOM SHALL BE TWISTED COPPER PAIR UNTIL IT IS BROKEN OUT INTO TWO SEPARATE SINGLE STRANDED LINES. CABLE RUN FROM LOOP AMPLIFIER TO LOOP START SHOULD BE <4'10". MEASURED RESISTANCE PER LOOP CHANNEL AND AT AMPLIFIER SHOULD NOT EXCEED 1.5 ohms.

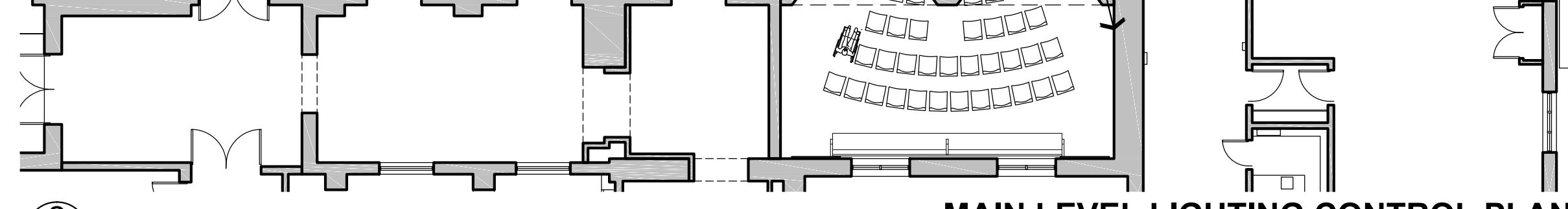
- (11.16) MAGNETIC INDUCTION LOOP WIRE CHANNEL 1 EST. 250' 14awg
- (11.17) MAGNETIC INDUCTION LOOP WIRE CHANNEL 2 EST. 260' 14awg
- (11.18) MAGNETIC INDUCTION LOOP WIRE CHANNEL 1 UNDER WD FLOOR (EST. 210' 14awg)
- (11.19) MAGNETIC INDUCTION LOOP WIRE CHANNEL 2 UNDER WD FLOOR (EST. 205' 14awg)





BALCONY LEVEL LIGHTING CONTROL PLAN

Scale: 3/32"=1'-0"

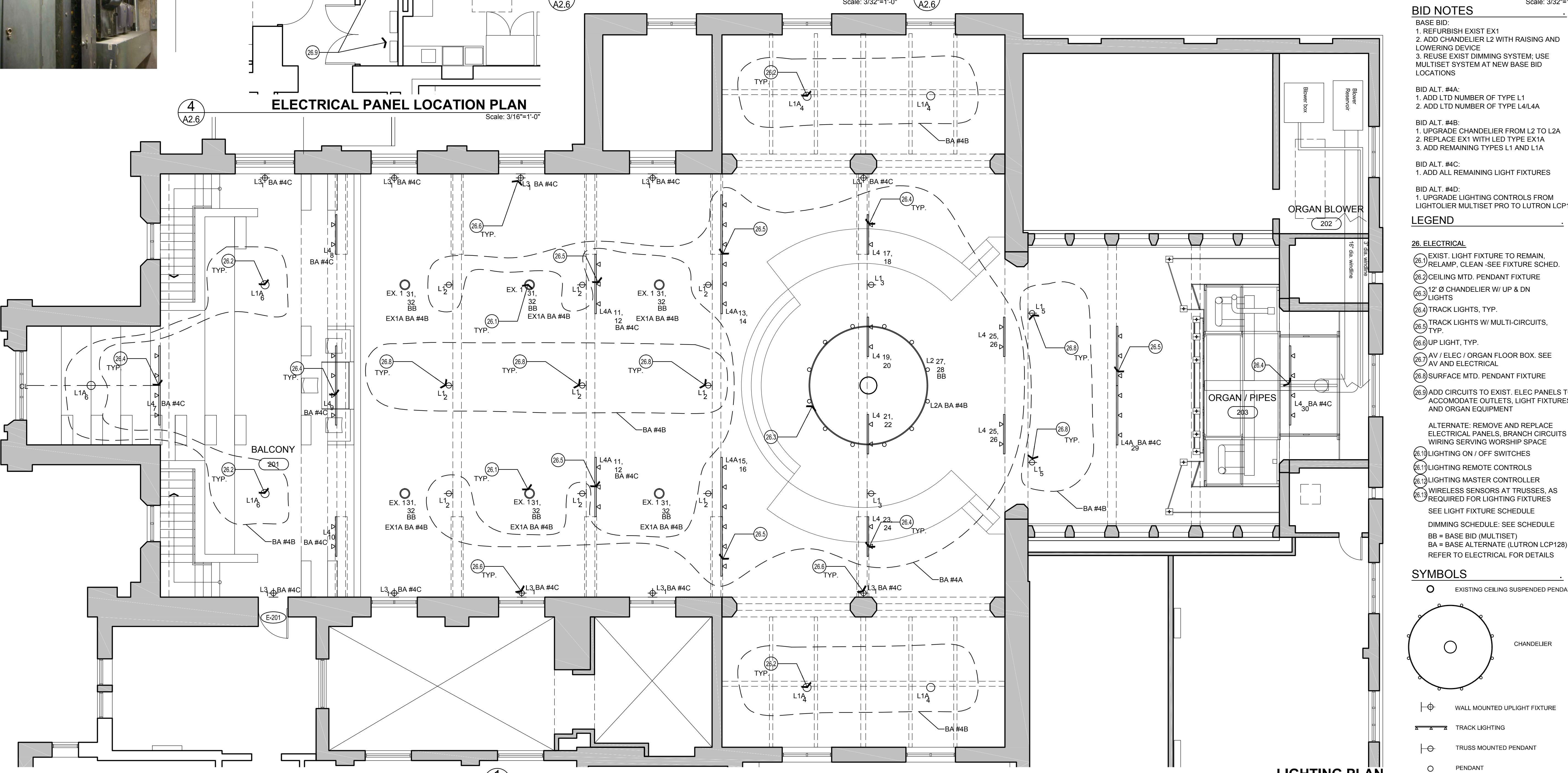


MAIN LEVEL LIGHTING CONTROL PLAN

Scale: 3/32"=1'-0"

ELECTRICAL PANEL LOCATION PLAN

Scale: 3/16"=1'-0"



LIGHTING PLAN

Scale: 3/16"=1'-0"



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LIGHTING PLANS

DRAWING NO.

A2.6

KGA PROJECT NO. 1103.03

**BID NOTES**

BASE BID:  
1. REFURBISH EXIST EX1  
2. ADD CHANDELIER L2 WITH RAISING AND LOWERING DEVICE  
3. REUSE EXIST DIMMING SYSTEM; USE MULTISSET SYSTEM AT NEW BASE BID LOCATIONS

BID ALT. #4A:  
1. ADD LTD NUMBER OF TYPE L1  
2. ADD LTD NUMBER OF TYPE L4/L4A

BID ALT. #4B:  
1. UPGRADE CHANDELIER FROM L2 TO L2A  
2. REPLACE EX1 WITH LED TYPE EX1A  
3. ADD REMAINING TYPES L1 AND L1A

BID ALT. #4C:  
1. ADD ALL REMAINING LIGHT FIXTURES

BID ALT. #4D:  
1. UPGRADE LIGHTING CONTROLS FROM LIGHTOLIER MULTISET PRO TO LUTRON LCP128

### LEGEND

#### 26. ELECTRICAL

- 26.1 EXIST. LIGHT FIXTURE TO REMAIN, RELAMP, CLEAN-SEE FIXTURE SCHED.
- 26.2 CEILING MTD. PENDANT FIXTURE
- 26.3 12' Ø CHANDELIER W/ UP & DN LIGHTS
- 26.4 TRACK LIGHTS, TYP.
- 26.5 TRACK LIGHTS W/ MULTI-CIRCUITS, TYP.
- 26.6 UP LIGHT, TYP.
- 26.7 AV AND ELECTRICAL
- 26.8 SURFACE MTD PENDANT FIXTURE

26.9 ADD CIRCUITS TO EXIST. ELEC PANELS TO ACCOMODATE OUTLETS, LIGHT FIXTURES AND ORGAN EQUIPMENT

ALTERNATE: REMOVE AND REPLACE ELECTRICAL PANELS, BRANCH CIRCUITS AND WIRING SERVING WORKSHIP SPACE

26.10 LIGHTING ON / OFF SWITCHES

26.11 LIGHTING REMOTE CONTROLS

26.12 LIGHTING MASTER CONTROLLER

26.13 WIRELESS SENSORS AT TRUSSES, AS REQUIRED FOR LIGHTING FIXTURES

SEE LIGHT FIXTURE SCHEDULE

DIMMING SCHEDULE: SEE SCHEDULE

BB = BASE BID (MULTISET)

BA = BASE ALTERNATE (LUTRON LCP128)

REFER TO ELECTRICAL FOR DETAILS

SYMBOLS

O EXISTING CEILING SUSPENDED PENDANT

○ CHANDELIER

□ WALL MOUNTED UPLIGHT FIXTURE

— TRACK LIGHTING

— TRUSS MOUNTED PENDANT

○ PENDANT



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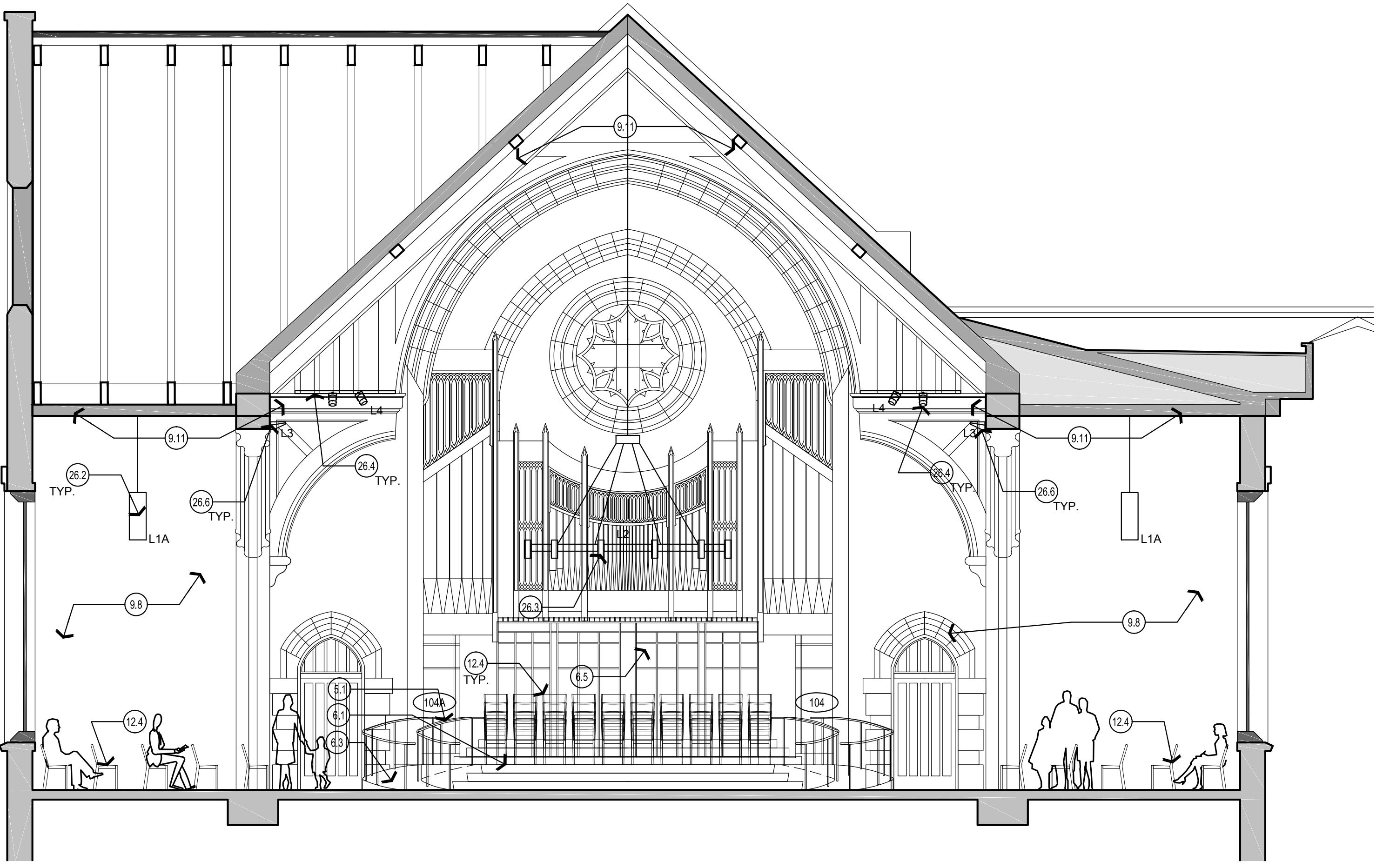
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SECTIONS AND ELEVATIONS

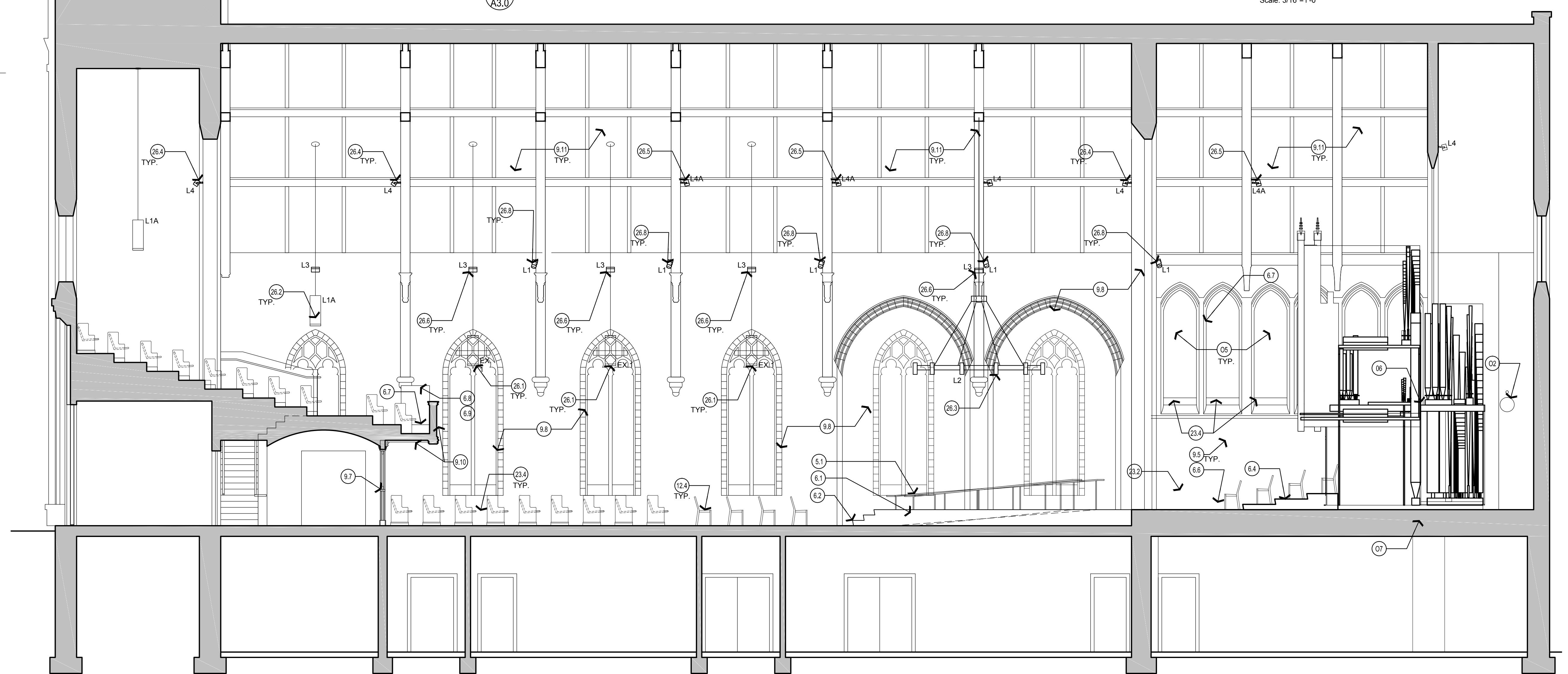
DRAWING NO.  
**A3.0**

KGA PROJECT NO. 1103.03



ELEVATION - EAST

Scale: 3/16"=1'-0"



SECTION - NORTH

Scale: 3/16"=1'-0"

### LEGEND

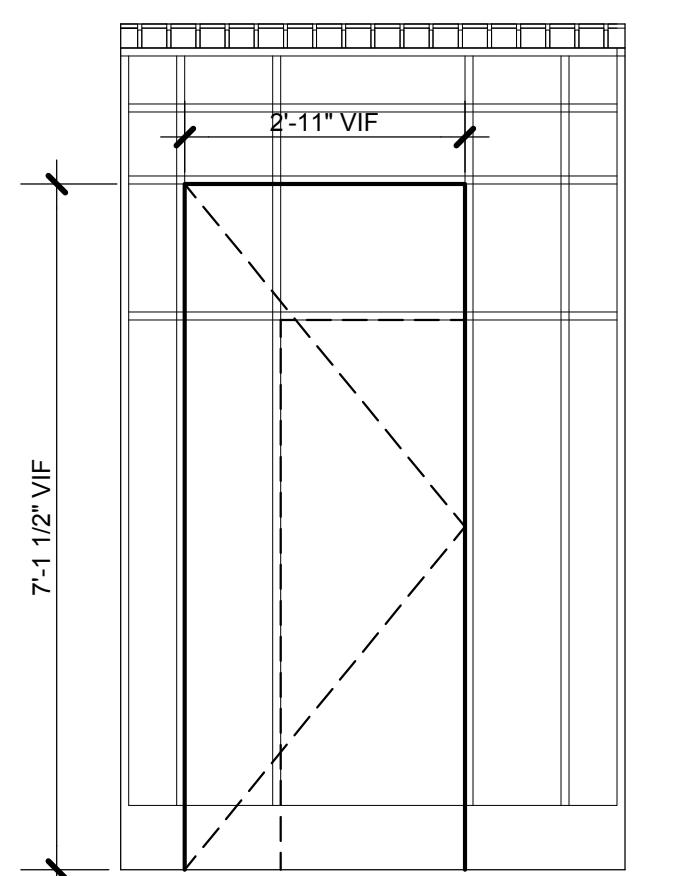
- 5. METALS
  - 5.1 PTD MTL. HANDRAIL  
ALTERNATE: BRONZE HAND RAILS
- 6. WOOD, PLASTICS, AND COMPOSITES
  - 6.1 WD CHANNEL EXTENSION
  - 6.2 WD STEPS TO CHANCEL
  - 6.3 HC WD RAMP
  - 6.4 DEMOUNTABLE ELEVATED CHOIR
  - 6.5 ORGAN WAINSCOT PANELING BY ORGAN MANUF.
  - 6.6 INSPECT WAINSCOT BEHIND THE REMOVED CHOIR PLATFORM TO VERIFY CONTINUITY OF WAINSCOT CONFIGURATION. RECONFIGURE AS NECESSARY TO MATCH EXISTING.
  - 6.7 WD FLOOR EXTENSION FOR A/V CONTROL CONSOLE
  - 6.8 WD VENEER ON WD STUDS WALL ENCLOSURE FOR A/V CONTROL. PLYWOOD SPECIES. VENEER CUT AND STAIN TO MATCH EXISTING FINISHES
  - 6.9 REINSTALL SALVAGED WAINSCOT FROM ALTAR AT THE EXTERIOR FACE OF A/V CONTROL WALL ENCLOSURE. REFINISH TO MATCH EXISTING FINISHES
- 8. DOORS & WINDOWS
  - 8.1 REINSTALL EXISTING DOOR TO SWING IN THE OPPOSITE DIRECTION. REUSE HINGES. PROVIDE NEW JAMB AS REQUIRED. WD SPECIES AND FINISH TO MATCH EXISTING. MODIFY THRESHOLD AS REQUIRED.
  - 8.2 REPLACE WD DOOR, INCREASE WIDTH TO THE ADJACENT WAINSCOT PANEL. VERIFY DIMENSIONS IN FIELD. SALVAGE WAINSCOT FROM EXISTING DOOR AND REINSTALL ON NEW DOOR.
- 9. FINISHES
  - 9.1 REFINISH EXIST WD FLOORING
  - 9.2 STRIP, CLEAN AND REFINISH STONE FLOOR
  - 9.3 WD FLOORING. SPECIES AND FINISH T.M.E.
  - 9.4 LINOLEUM FLOOR ON TOP OF EXIST FLOORING
  - 9.5 REFINISH WAINSCOT
  - 9.6 REFINISH DOORS
  - 9.7 REFINISH WD & GLASS PARTITION AND DOORS ASSOCIATED CLEAN CEMENTITIOUS PLASTER AND STONE TRIM AT WALLS
  - 9.8 ALTERNATE: RESEAL CEMENTITIOUS PLASTER WITH OPAQUE STAIN TO ESTABLISH CONSISTENT APPEARANCE
  - 9.9 REPAIR DAMAGED SPOTS OF CEMENTITIOUS PLASTER AT WALLS AND AROUND AIR GRILLES
  - 9.10 REFINISH BALCONY FRON GUR RAIL AND WD CEILING UNDER BALCONY
  - 9.11 ALTERNATE: REPAIR, CLEAN AND REFINISH WOOD AT CEILING AT WORSHIP SPACE, INCLUDING VENEER TRUSSES, PURLINS, SPACERS, BRACKETS, DECK AND ALL OTHER WOOD TRIM
- 10. SPECIALTIES
  - 10.1 DEMOUNTABLE WD SCREEN WALL. ALTERNATE
  - 10.2 FUTURE FLOOR RISING PROJECTION SCREEN. PROVIDE A/V / ELEC CONNECTION AND COVERED FLOOR OPENING FOR FUTURE INSTALLATION
- 12. FURNISHINGS
  - 12.3 LITURGICAL FURNITURE, N.I.C.
  - 12.4 SEATING, N.I.C.
  - 12.5 RELOCATED PIANO
  - 12.6 ORGAN CONSOLE
  - 12.7 AV ROLLOP CONTROL DESK. ALTERNATE
  - 12.8 RELOCATED TYPE 1 PEWS
  - 12.9 RELOCATED TYPE 2 PEWS
  - 12.10 RELOCATED TYPE 3 PEWS
  - 12.11 RELOCATED TYPE 4 PEWS
  - 12.12 RELOCATED TYPE 5 PEWS
  - 12.13 MODIFIED TYPE 6 PEWS
- 23. HVAC
  - 23.1 HVAC GRILL AT STEP AND SIDE OF RAISED SANCTUARY. SEE MECHANICAL
  - 23.2 HVAC RETURN GRILLES AT WAINSCOT. SEE MECHANICAL
  - 23.3 HVAC RETURN GRILLES AT FLOOR. SEE MECHANICAL
  - 23.4 HVAC SUPPLY GRILL. SEE MECHANICAL
- 26. ELECTRICAL
  - 26.1 EXIST. LIGHT FIXTURE TO REMAIN, RELAMP, CLEAN - SEE FIXTURE SCHED.
  - 26.2 CEILING MTD. PENDANT FIXTURE
  - 26.3 12" Ø CHANDELIER W/ UP & DN LIGHTS
  - 26.4 TRACK LIGHTS, TYP.
  - 26.5 TRACK LIGHTS W/ MULTI-CIRCUITS, TYP.
  - 26.6 UP LIGHT, TYP.
  - 26.7 AV / ELEC / ORGAN FLOOR BOX. SEE AV AND ELECTRICAL
  - 26.8 SURFACE MTD. PENDANT FIXTURE
  - 26.9 ADD CIRCUITS TO EXIST. ELEC PANELS TO ACCOMODATE OUTLETS, LIGHT FIXTURES AND ORGAN EQUIPMENT
  - 26.10 ALTERNATE: REMOVE AND REPLACE ELECTRICAL PANELS, BRANCH CIRCUITS AND WIRING SERVING WORSHIP SPACE
  - 26.11 LIGHTING ON / OFF SWITCHES
  - 26.12 LIGHTING REMOTE CONTROLS
  - 26.13 LIGHTING MASTER CONTROLLER
  - 26.14 WIRELESS SENSORS ON TRUSSES, AS REQUIRED FOR LIGHTING FIXTURES



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DOOR 104-A  
SOLID CORE  
WD DOOR W/ WAISNCOT  
APPLIED, OPPOSITE DOOR 104,  
OPP HAND.

DOOR TYPES  
Scale: 1/2"=1'-0"

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SCHEDULES

DRAWING NO.  
A7.0

KGA PROJECT NO. 1103.03

FINISH SCHEDULE												
				WALLS					CEILING			
RM No.	ROOM NAME	FLOOR	BASE	NORTH	SOUTH	EAST	WEST	ALL	MAT'L	HEIGHT*	REMARKS	
100	ENTRY	ETR	ETR	-	-	-	-	ETR	ETR	ETR	-	
101	NARTHEX	ETR	ETR	-	-	-	REFINISH WD/REFINISH GLASS	-	-	ETR	ETR	-
102	NAVE	ETR STONE/LIN	ETR	-	-	-	-	ETR	ETR	ETR	NOTE 1, NOTE 3	
103	SANCTUARY	WD T.M.E.	-	WD WAISNCOT/NOTE 1	-	-	-	NOTE 1	ETR	ETR	NOTE 3	
104	CHANCEL	ETR WD/WD T.M.E.	ETR	-	-	-	-	WD WAISNCOT	-	ETR	ETR	NOTE 2
105	ORGAN	-	-	-	-	-	-	ETR	ETR	ETR	PER ORGAN MANUFACTURER	
106	CHOIR STORAGE	ETR	ETR	-	-	-	-	ETR	ETR	ETR	NOT IN SCOPE	
107	STORAGE	ETR	ETR	-	-	-	-	ETR	ETR	ETR	NOT IN SCOPE	
108	CHOIR	ETR	ETR	-	-	-	-	ETR	ETR	ETR	NOT IN SCOPE	
201	BALCONY	ETR WD T.M.E. ON AV CONTROL AREA	ETR	-	-	-	-	ETR	ETR	ETR	FLOOR EXTENSION WD SPECIES AND STN TME	
202	ORGAN BLOWER	ETR	ETR	-	-	-	-	PTD.GWB	ETR	ETR	PTD FLOOR GRAY FOR ORGAN PREPARATION REQUIREMENTS	
203	ORGAN/PIPES	-	-	-	-	-	-	-	-	-	PER ORGAN MANUFACTURER	

FINISH SCHEDULE  
Scale: NTS

3  
A7.0

DOOR SCHEDULE															
		DOOR				FRAME									
DOOR No.	ROOM NAME	TYPE	SIZE	THICKNESS	MATERIAL	FINISH	Glass	MAT'L/TYPE	FINISH	HEAD DTL	JAMB DTL	SILL DTL	RATING	HARDWARE	REMARKS
104	CHANCEL	A	3'-0" X 7'-2" VIF	1 3/4"	SCWD	STAIN*, T.M.E.	-	WD	STAIN	-	-	-	-	1	SEE DETAIL 8 & 9 / A7.1
104A	CHANCEL	A	3'-0" X 7'-2" VIF	1 3/4"	SCWD	STAIN*, T.M.E.	-	WD	STAIN	-	-	-	-	1	SEE DETAIL 8 & 9 / A7.1
E-201	BALCONY	ETR	ETR	ETR	ETR	ETR	ETR	ETR	STAIN	-	-	-	-	-	SWING OPPOSITE DIRECTION SEE NOTE 8.1 IN A2.1

DOOR SCHEDULE  
Scale: NTS

1  
A7.0

A7.0

KGA PROJECT NO. 1103.03



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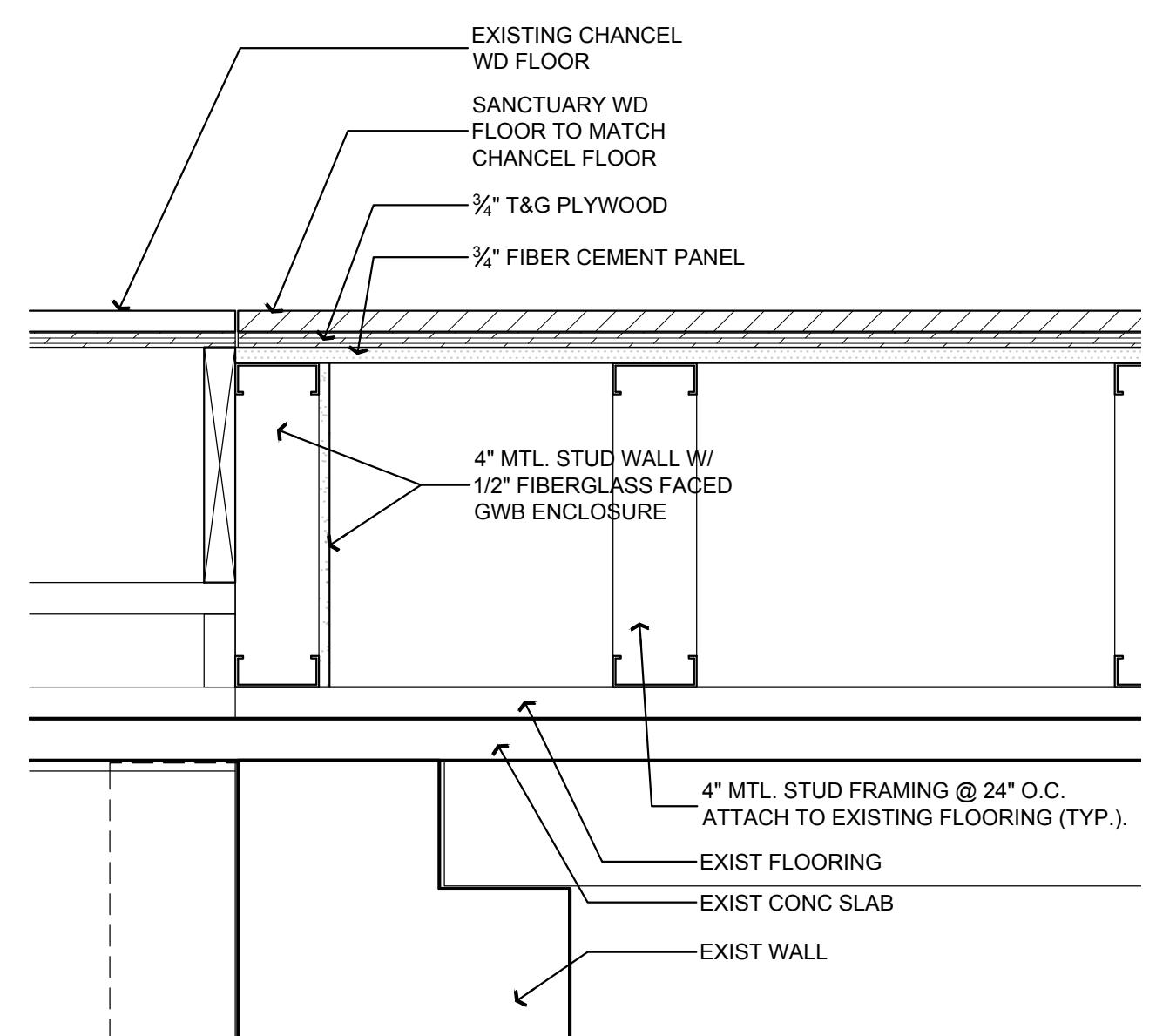
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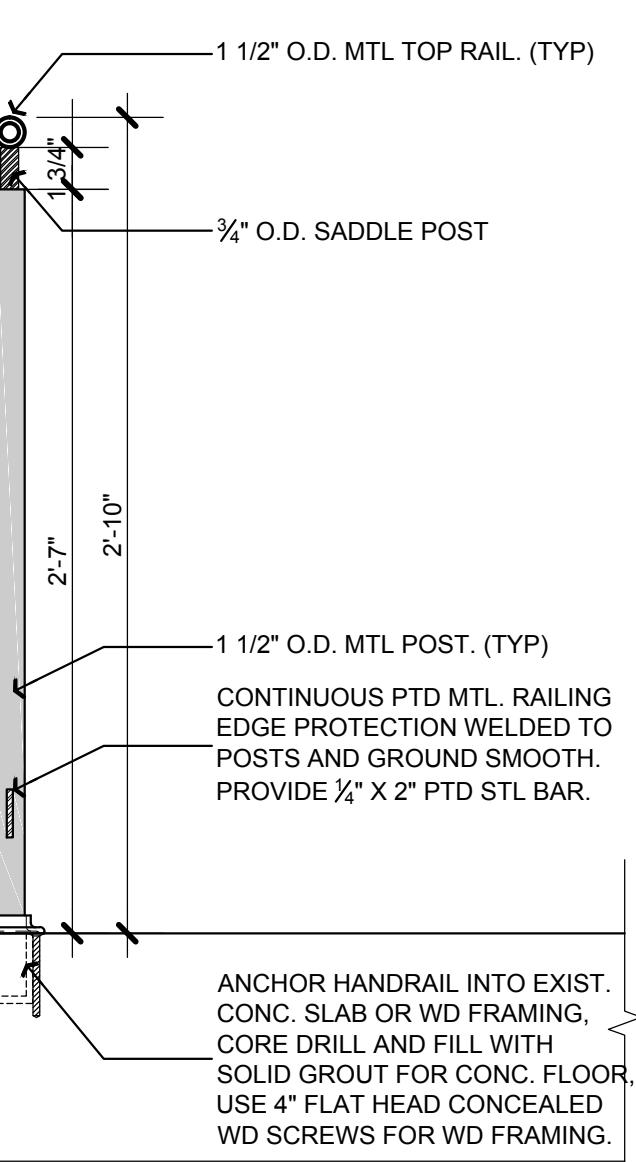
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DETAILS

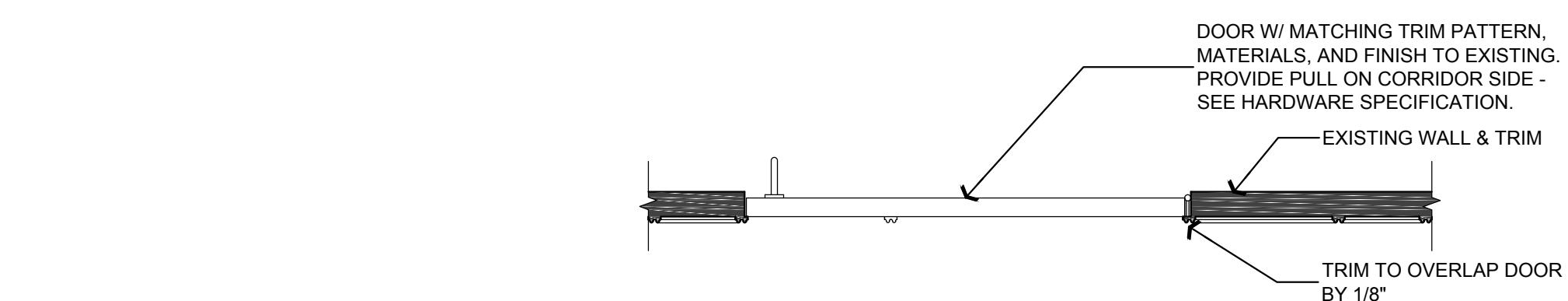
DRAWING NO.  
**A7.1**



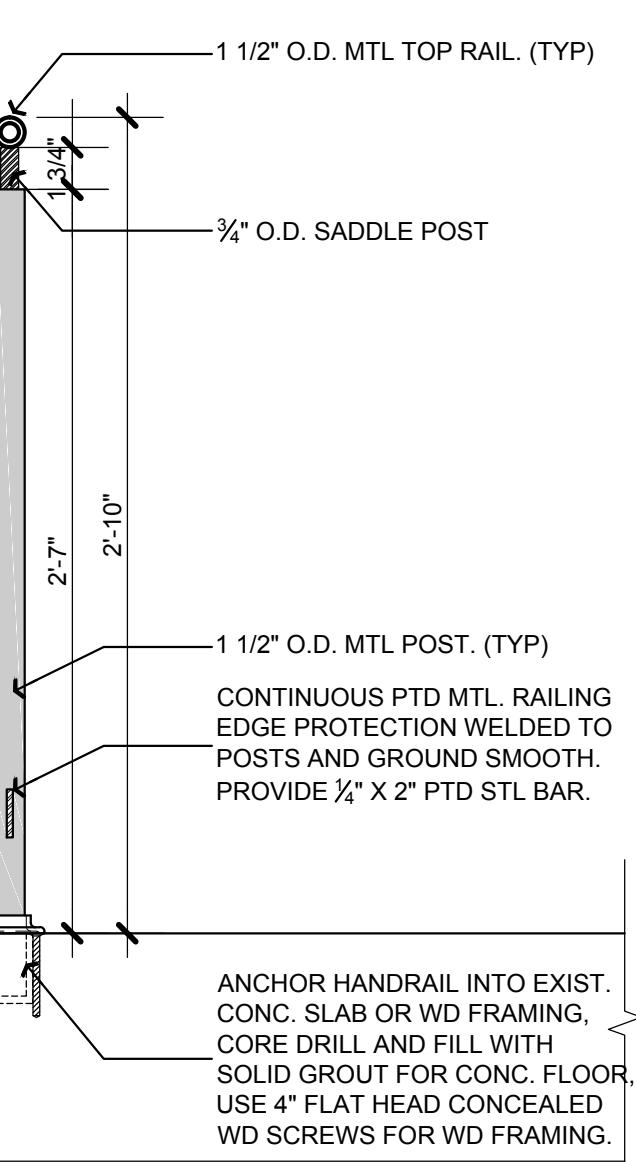
**RAISED SANCTUARY AT EXIST. CHANCEL**  
A7.1 Scale: 1 1/2"=1'-0"



**RETURN AIR GRILLE AT STEP**  
A7.1 Scale: 3'=1'-0"



**TYPICAL RAIL SECTION**  
A7.1 Scale: 1 1/2"=1'-0"



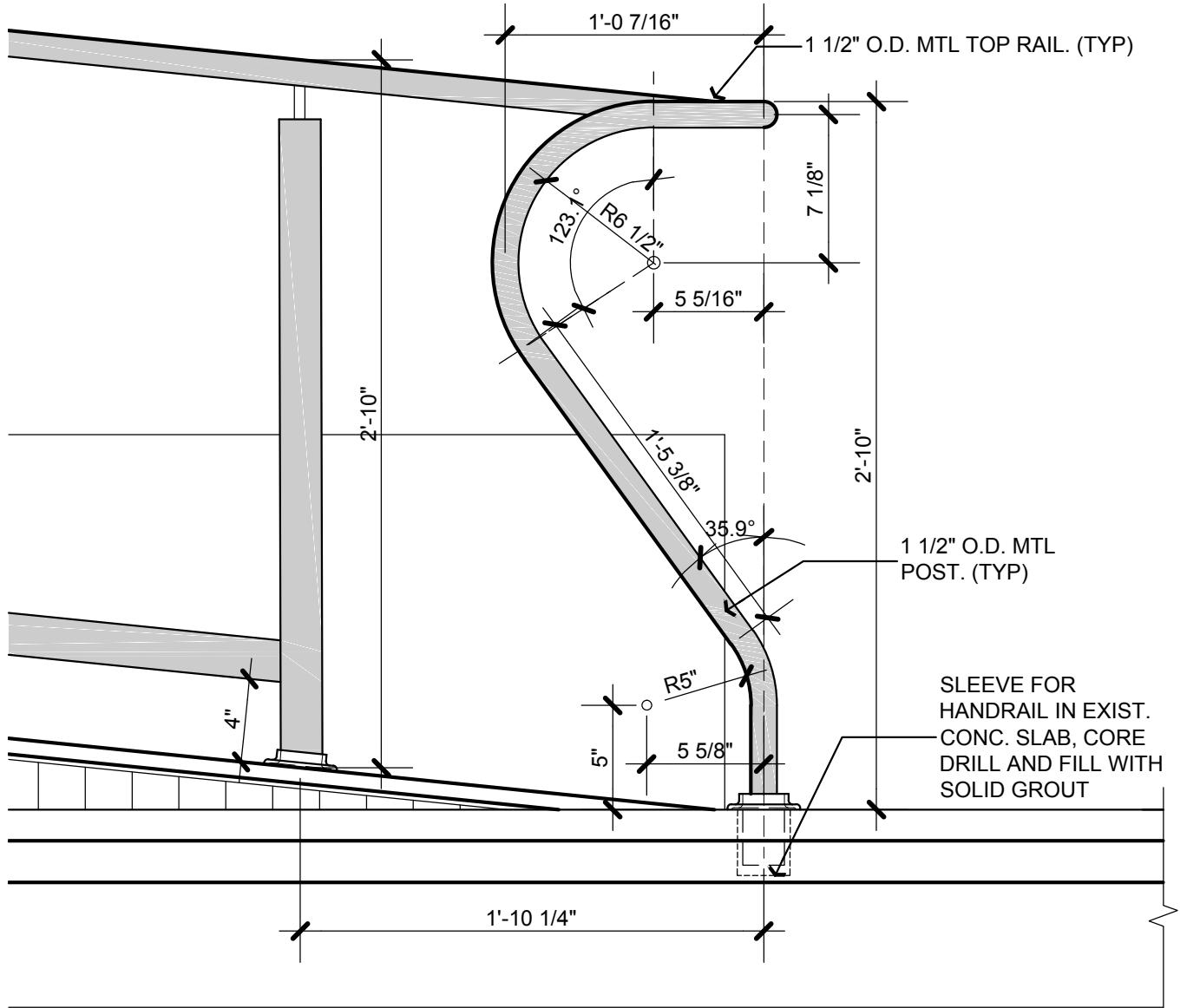
**RAIL TERMINATION AT RAMP**  
A7.1 Scale: 1 1/2"=1'-0"

**RAISED SANCTUARY SUPPORT**  
A7.1 Scale: 1 1/2"=1'-0"

**5**  
A7.1

**FRONT STEPS AT RAISED SANCTUARY**  
A7.1 Scale: 1 1/2"=1'-0"

**6**  
A7.1



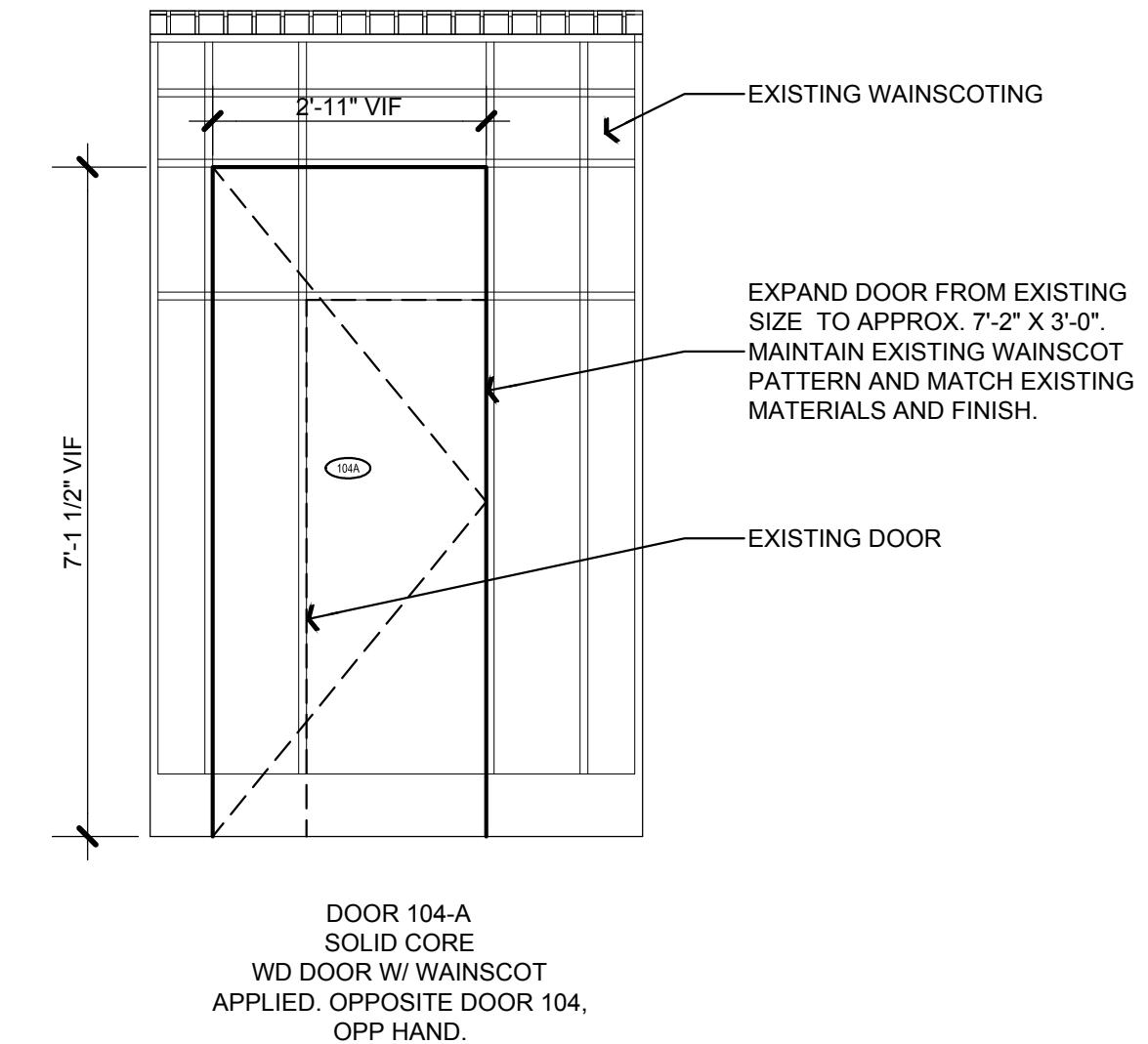
**INFILL AT ORGAN PIPES**  
A7.1 Scale: 3/4"=1'-0"

**7**  
A7.1

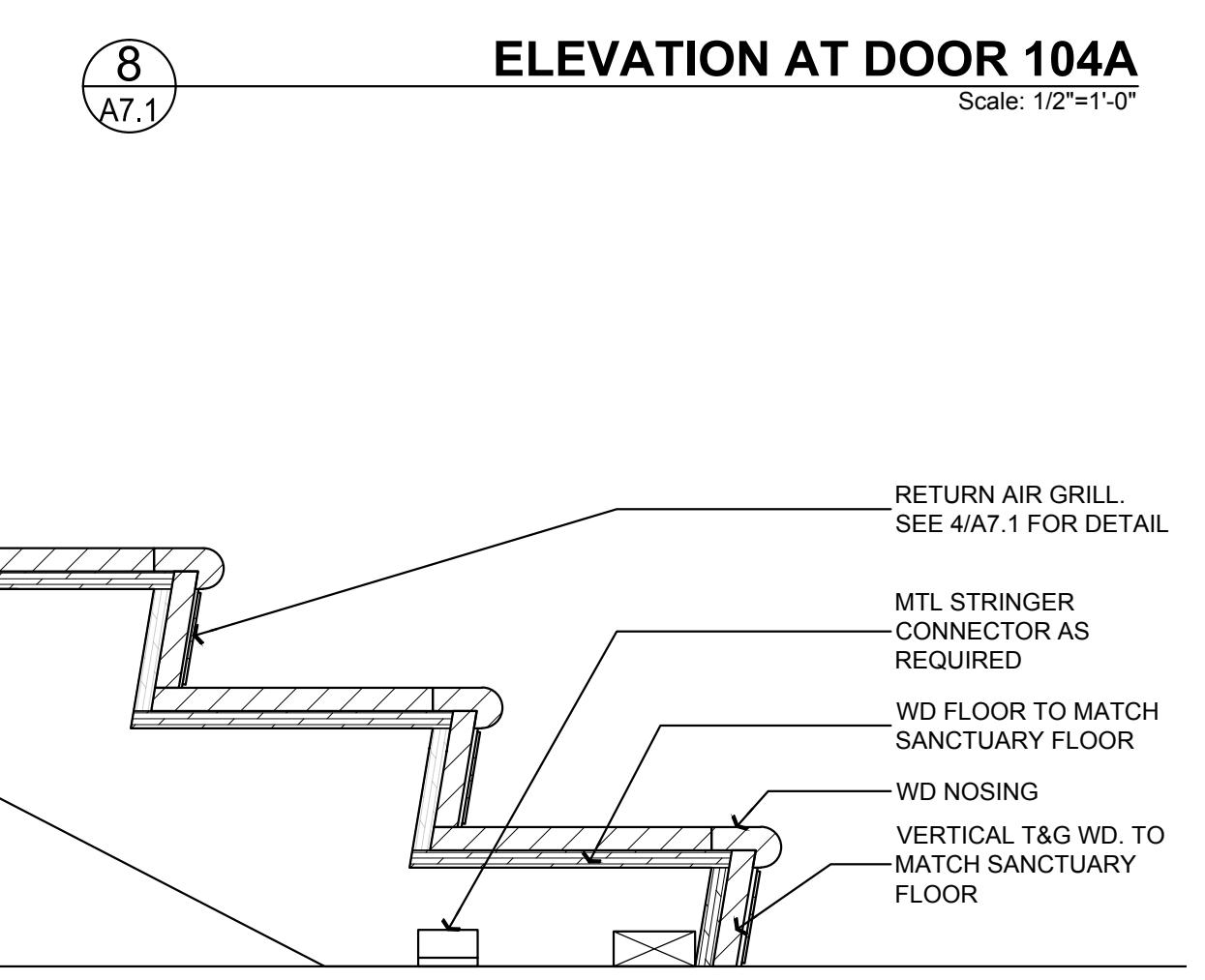
**DETAIL AT DOOR 104A**  
A7.1 Scale: 1"=1'-0"

**8**  
A7.1

**ELEVATION AT DOOR 104A**  
A7.1 Scale: 1/2"=1'-0"



DOOR 104-A  
SOLID CORE  
WD DOOR W/ WAISCOAT  
APPLIED. OPPOSITE DOOR 104,  
OPP HAND.



RETURN AIR GRILL,  
SEE 4/A7.1 FOR DETAIL

MTL STRINGER  
CONNECTOR AS  
REQUIRED

WD FLOOR TO MATCH  
SANCTUARY FLOOR

WD NOSING

VERTICAL T&G WD. TO  
MATCH SANCTUARY  
FLOOR

**9**  
A7.1

**10**  
A7.1





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**KLOESEL  
Engineering, PA**  
License #C-1207  
8 Magnolia Avenue Suite 100  
Asheville, North Carolina 28801  
(828) 255-0780

DRAWING NO.

**S1**

KGA PROJECT NO. 1103.03

### STRUCTURAL NOTES for 1<sup>st</sup> PRESBYTERIAN ORGAN INSTALLATION

#### A. GENERAL

- The structure is designed in accordance with the North Carolina State Building Code – 2012 Edition (2009 International Building Code with current North Carolina amendments).
- The design loads are as follows:
 

Live Load	100 psf
Chancel Floor	100 psf
Super-Imposed Dead Load	19,000 lbs
Organ Equipment	19,000 lbs
- The structure has been designed to withstand In-Service loads only. Methods, procedures, and sequences of construction are the responsibility of the Contractor. The Contractor shall take all necessary precautions to maintain and insure the integrity of the structure at all stages of construction.
- Horizontal and vertical clearances from the existing adjacent structure shall be verified before construction is begun. Variations from the dimensions indicated on the contract documents shall be brought to the attention of the Architect and/or Structural Engineer.

#### B. STRUCTURAL STEEL

- Structural steel angles, channels, and plates shall conform to ASTM A36, grade 36 unless otherwise noted.
- Structural steel tubing shall conform to ASTM A500, Grade B,  $f_y = 46$  ksi.
- Structural steel pipe shall conform to ASTM A53, Type E or S, Grade B,  $f_y = 35$  ksi.
- Bolts for connecting structural steel shall be  $\frac{3}{8}$ " diameter, conforming to ASTM A325-N, U.O.N.
- Fabrication and erection of all structural steel shall be in accordance with the latest AISC Specifications.
- Welding shall conform to the American Welding Society Standard D1.1. Electrodes for shop and field welds shall conform to AWS A5.1 or AWS 5.5, Class E70XX, low hydrogen, unless noted otherwise. Only welders who have been qualified by tests as prescribed in the referenced Standards to perform the type of work required shall make welds.
- Splicing of structural steel members where not detailed on the Contract Documents is prohibited without the prior approval of the Structural Engineer as to the location, type of splice, and connection to be made.

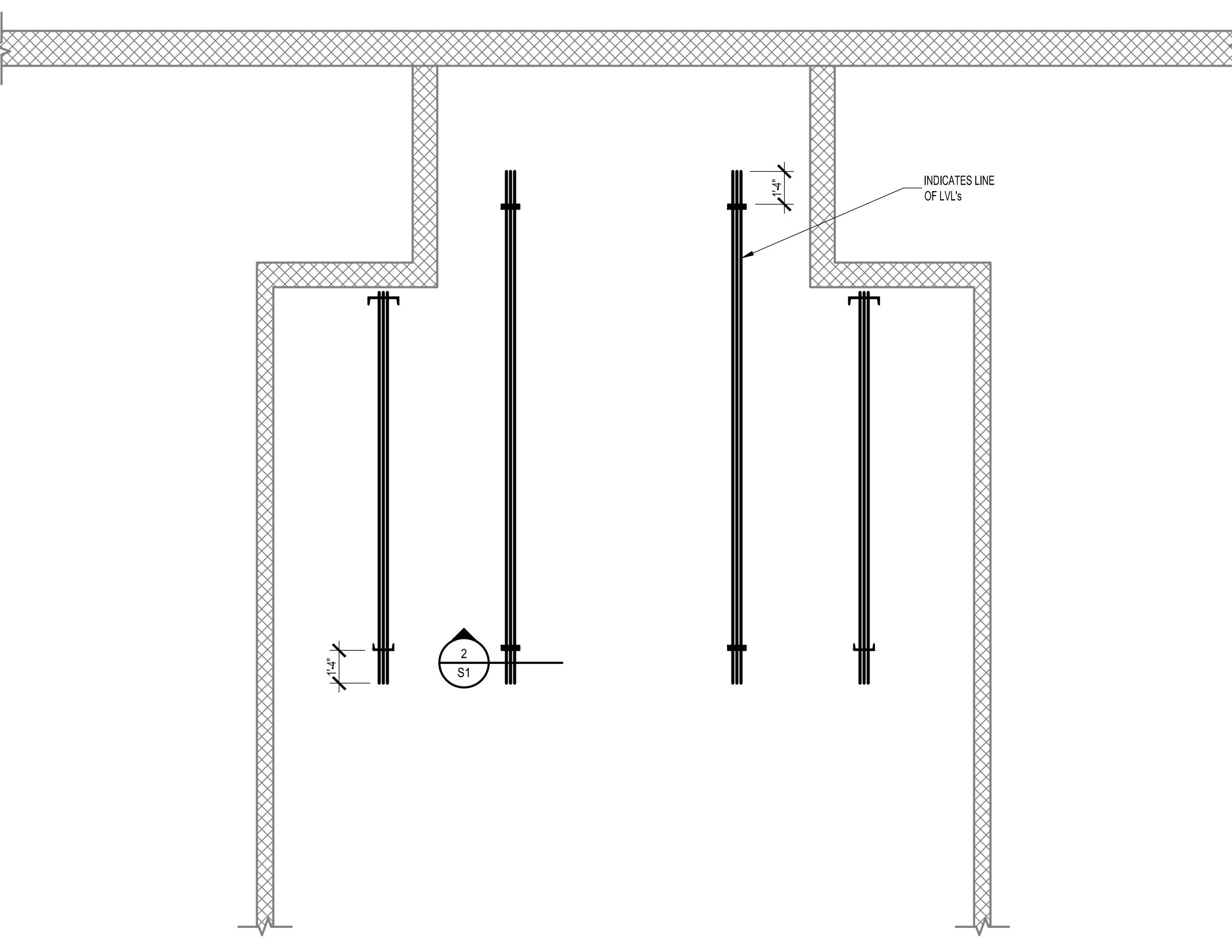
#### C. COLD-FORMED STEEL FRAMING

- Steel used in the manufacture shall be hot-dipped galvanized steel, (G-60/Z180) minimum coating weight and shall conform to ASTM A653/A653M, Grade D, minimum yield point of 50,000 psi for 12,14, and 16 gauge members and ASTM A446, Grade A, minimum yield point of 33,000 psi for 18 and 20 gauge members.
- Light-gauge steel framing members and connections shall conform to the most current version of "Specifications for the Design of Cold-Formed Steel Members" by the American Iron and Steel Institute.
- All framing components shall be cut squarely for attachment to perpendicular members or as required for an angular fit against abutting members.
- All field cutting of studs must be done by sawing or shearing. Torch cutting of cold-formed members is not acceptable.
- No splices in structural cold-formed members may be made without prior review by the Structural Engineer, and specific details for any such splice(s).
- Provide double studs at jambs of all door and window openings, which exceed 24" horizontal width, unless otherwise noted on the drawings.
- The continuous light-gauge bottom track at the base of the metal stud wall shall be attached to the supporting concrete/steel using power-actuated fasteners: Ramset model 1512SD with  $\frac{7}{8}$ " washer, 1 $\frac{1}{2}$ " length, 0.145 shank diameter, 1 $\frac{1}{4}$ " penetration, with or an approved equivalent.

#### D. STRUCTURAL LUMBER

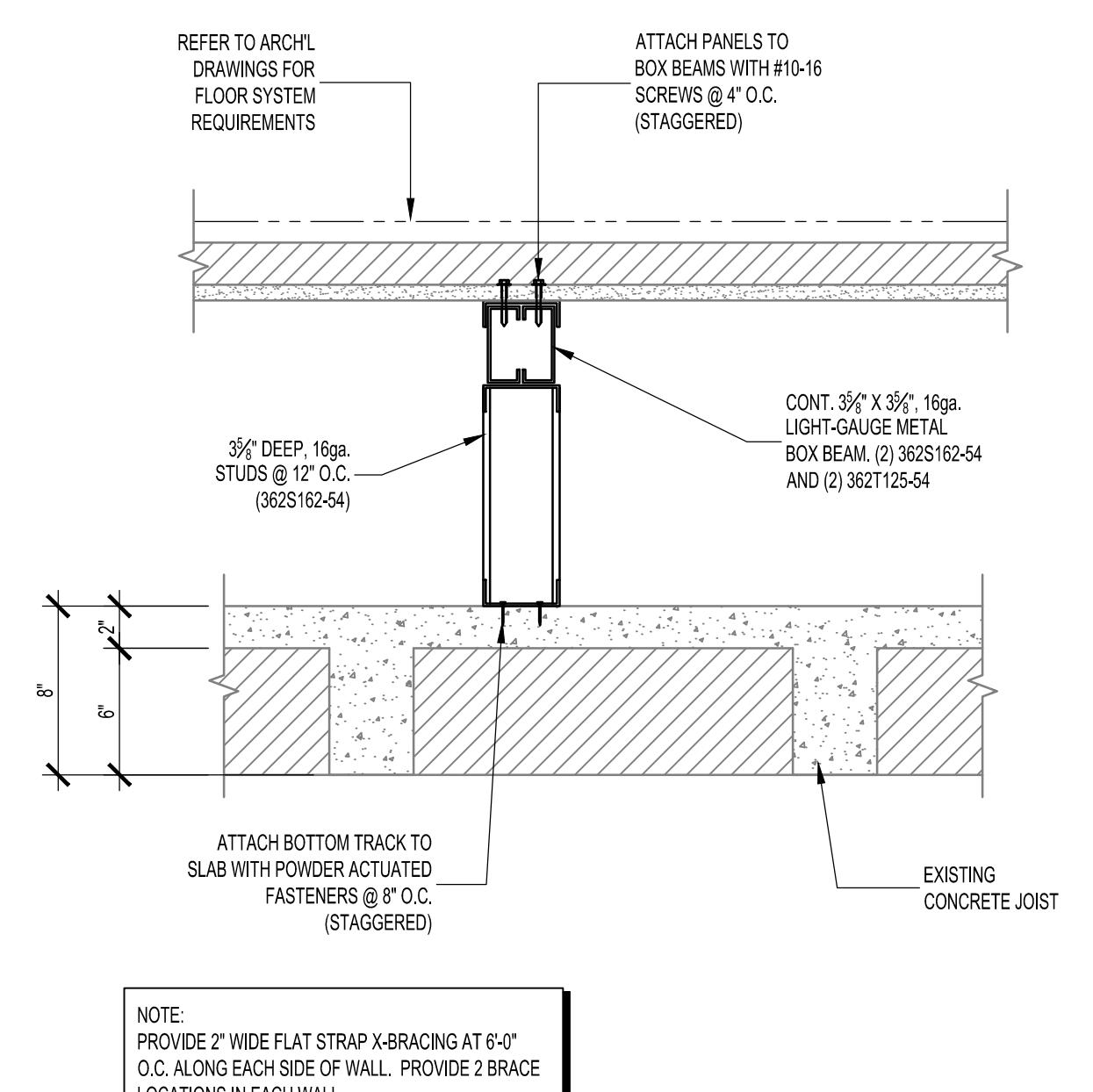
- All structural lumber shall conform to the most current applicable specifications of the American Institute of Timber Construction.
- All structural lumber shall be a minimum of No. 2, Southern Yellow Pine (SYP#2), with maximum moisture content of 19%, unless otherwise noted. Wall studs may be No. 2, Spruce-Pine-Fir (SPF#2), unless otherwise noted.
- All lumber noted "pressure treated" (P.T.) shall be pressure treated with water-borne preservatives. Pressure treatment shall comply with requirements AWPB standards C2 and LP-22.
- Metal connectors used to support pressure-treated wood members shall have a zinc coating conforming to the requirements of a G185 coating (1.85 oz/ft<sup>2</sup>). This conforms to the Simpson type ZMAX finish. All fasteners used with these connectors shall conform to the equivalent G185 coating.
- Provide nailing pattern in compliance with the North Carolina State Building Code recommended fastening schedule when joining two or more framing members. Provide floor and roof bridging in accordance with the NCSBC.
- Engineered structural wood products (i.e. PSL, LVL) shall have the minimum structural properties:

PSL	LVL
▪ Flexural Stress ( $F_b$ ): 2,900 psi	2,600 psi
▪ Modulus of Elasticity (E): 2,000 ksi	1,900 ksi
▪ $F_c$ perpendicular: 650 psi	750 psi

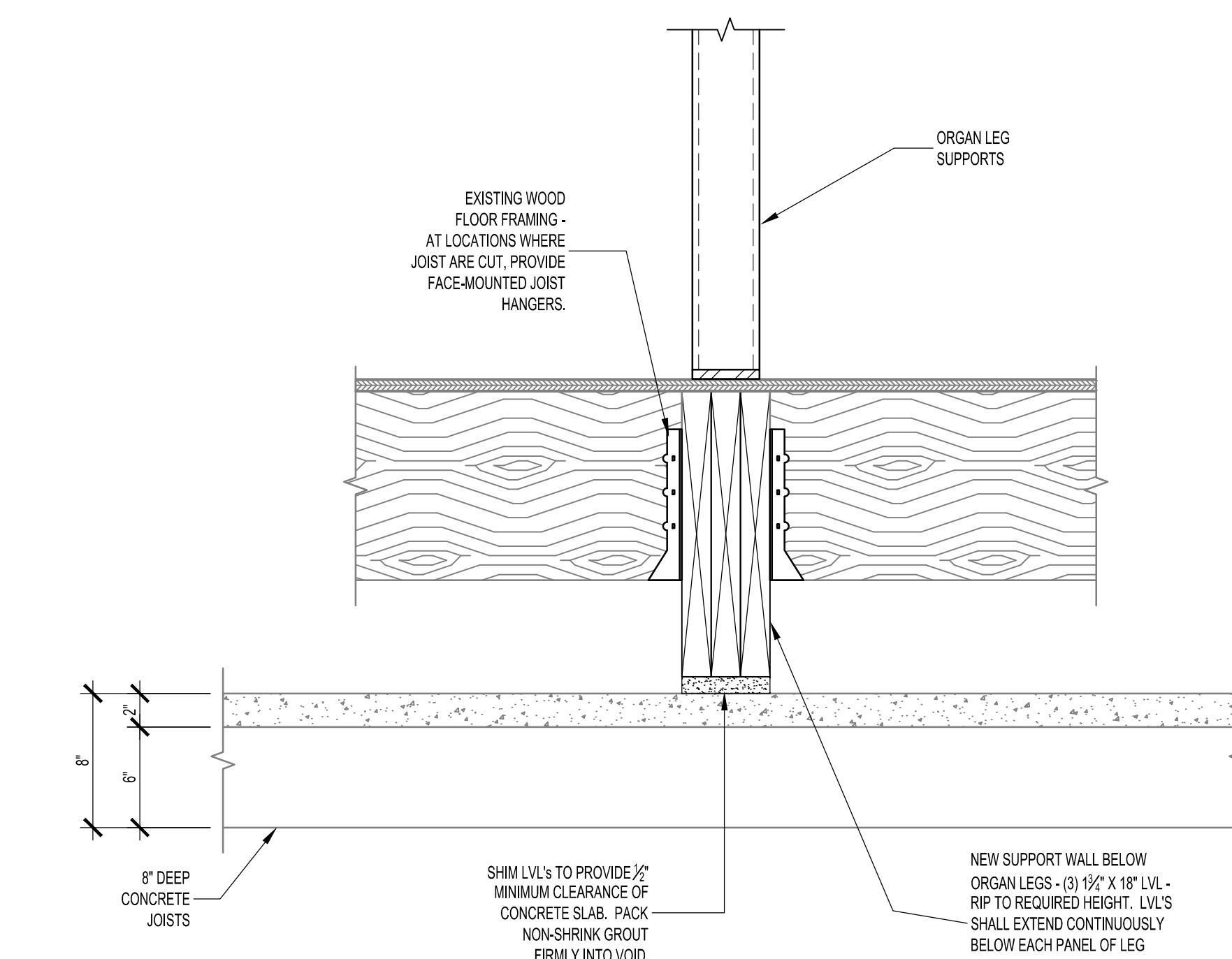



MAIN LEVEL PLAN

1/4"=1'-0"



1  
LIGHT-GAUGE METAL STUD  
WALL @ CHANCEL EXTENSION



2  
SECTION AT LVL SUPPORT



3-14-2014

## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

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MECHANICAL NOTES  
AND SCHEDULES

DRAWING NO.

M1

KGA PROJECT NO. 1103.03

## MECHANICAL SPECIFICATIONS

- Shop Drawings: Provide product data for all equipment and materials. Include pertinent dimensions, materials of construction, performance characteristics, weights and factory and field wiring diagrams.
- Operation and Maintenance Manuals: Provide 3 bound O&M Manuals at the completion of the project. Include approved shop drawings and manufacturer's maintenance manuals.
- Record Drawings: Contractor shall maintain a set of drawings on the job site to record all differences between the project documents and "As-Built". Contractor shall provide a set of "As-Built" drawings to the Owner at the completion of the project.
- Warranty: Contractor shall warranty the installation against defects for a period of one year from the date of Owner acceptance. Any defective materials or workmanship shall be replaced at no cost to the Owner.
- Permits and Fees: Contractor shall obtain and pay for all permits, fees and inspections required under his portion of the work.
- Common Motor Requirements: Motors shall comply with NEMA MG 1 unless otherwise indicated. Polyphase motors shall be NEMA MG 1, Design B, medium induction motor, energy efficient, as defined in NEMA MG 1, with a service factor of 1.15. Ball bearings shall be regreasable, shielded, antifriction ball bearings suitable for radial and thrust loading. Motor enclosure shall be cast iron for motor frame sizes 324T and larger; rolled steel for motor frame sizes smaller than 324T. Single phase motors larger than 1/20 hp shall be one of the following, to suit starting torque and requirements of specific motor application, permanent-split capacitor, split phase capacitor start, inductor run or capacitor start, multiphase motors shall be variable-torque, permanent-split-capacitor type. Bearings shall be prelubricated, antifriction ball bearings or sleeve bearings suitable for radial and thrust loading. Thermal Protection: Internal protection to automatically open power supply circuit to motor when winding temperature exceeds a safe value calibrated to temperature rating of motor insulation. Thermal-protection device shall automatically reset when motor temperature returns to normal range. Motors 1/3hp and smaller shall be 115v/1ph, motors 1/2hp and larger shall be 208-230v/3ph unless noted otherwise.
- Testing and Balancing: Perform testing and balancing procedures on each system according to the procedures contained in AABC's "National Standards for Total System Balance", ASHRAE 111, NEBB's "Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems" or SMACNA's "HVAC Systems - Testing, Adjusting, and Balancing" and in this Section. Prepare test reports for both fans and outlets. Prepare a certified written report; tabulate and divide the report into separate sections for tested systems and balanced systems. Include a certification sheet at the front of the report's binder, signed and sealed by the certified testing and balancing engineer. Include a list of instruments used for procedures, along with proof of calibration. The final report shall contain the following in addition to certified field-report data, fan curves, manufacturers' test data and field test reports prepared by system and equipment installers, other information relative to equipment performance; do not include Shop Drawings and product data. In addition to form titles and entries, include the following data title page, name and address of the TAB contractor, project name, project location, report date, signature of TAB supervisor who certifies the report, table of contents. The report shall contain a summary of contents including the following, indicated versus final performance, notable characteristics of systems, description of system operation sequence if it varies from the Contract Documents, nomenclature sheets for each item of equipment, data for terminal units, including manufacturer's name, type, size, and fittings, notes to explain why certain final data in the body of reports vary from indicated values, test conditions for fans performance forms including settings for outdoor, return, and exhaust-air dampers, conditions of filters, cooling coil, wet- and dry-bulb conditions, fan drive settings including settings and percentage of maximum pitch diameter and other system operating conditions that affect performance.
- PVC Piping: PVC pipe and fittings shall be solid-Wall PVC Pipe, ASTM D 2665, PVC socket fittings shall be ASTM D 2665, made to ASTM D 3311, drain, waste, and vent patterns and to fit Schedule 40 pipe.
- Piping Insulation: Flexible elastomeric insulation shall be closed-cell sponge- or expanded-rubber materials complying with ASTM C 334, Type I for tubular materials. Mineral-fiber, preformed pipe insulation shall be Type I, 850 Deg F, mineral or glass fibers bonded with a thermosetting resin, complying with ASTM C 547, Type I, Grade A, with factory-applied ASJ or with factory-applied ASJ-SS. Install insulation continuously through non-fire rated walls and partitions. Install insulation continuously through penetrations of fire-rated walls and partitions and seal in accordance with a UL approved through penetration system. Domestic cold, hot water and recirculated hot water insulation shall be 1inch thick mineral-fiber. Insulate exposed piping including drain and water supplies under handicapped lavatories and sinks, to meet the requirements of ADA 4.19.4, ADAAG 606.5, ICC/ANSI A117.1 606.6, or GSA & DOD's ABA 606.5 requirement to "protect against contact - no sharp or abrasive surfaces"
- Domestic Water Piping (Metallic): Hard copper tube shall be ASTM B 88, Type L water tube, draw temper. Soft copper tube shall be ASTM B 88, Type K water tube, annealed temper. Fittings shall be solder-copper, solder-joint fittings, ASME B16.18, pressure fittings or wrought-copper, solder-joint fittings, ASME B16.22 pressure fittings. Bronze flanges shall be ASME B16.24, Class 150, with solder-joint ends. Copper unions shall be MSS SP-123 cast-copper-calley, hexagonal-stock body with ball-and-socket, metal-to-metal sealing surfaces and solder-joint threads. Above grade water piping shall be Type K hard copper. Below grade piping shall be Type K soft copper. Piping shall be tested for leaks in accordance with Chapter 312 of the 2012 NC Plumbing Code. Domestic water piping shall be sanitized in accordance with Chapter 610 of the 2012 NC Plumbing Code
- Duct Insulation: Mineral-Fiber Blanket Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 553, Type II and ASTM C 1290. Type III with factory-applied FSK jacket (FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C 1136, Type III). FSK Jacket Adhesive shall comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints. Concealed, supply-air duct shall be insulated with mineral-fiber blanket, 1-1/2 inches thick (R6) and with a nominal density of 1.5-lb/cu. ft. Concealed, return-air duct shall be insulated with mineral-fiber blanket, 1-1/2 inches thick (R6) and with a nominal density of 1.5-lb/cu. ft. Concealed outside air duct and plenums shall be insulated with mineral-fiber blanket, 2 inches thick (R8) and with a nominal density of 1.5-lb/cu. ft. Exposed exhaust air duct downstream of exhaust fan and plenum at louvers to be insulated with mineral fiber board, 1-1/2 inches thick (R6) with a nominal density of 3.0-lb/cu. ft.
- Metal Ducts: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" based on indicated static-pressure class unless otherwise indicated. Select joint types and fabricate according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible." Figure 2-1, "Rectangular Duct/Transverse Joints," for static-pressure class, applicable sealing requirements, materials involved, duct-support intervals, and other provisions in SMACNA's

## AIR DEVICE SCHEDULE

TAG	S1	S2	R1	R2
manufacturer (or equal)	Price	Price	Price	Price
model	520	LG50	LG50	LG50
type	Double deflection, 3/4" blade spacing, sidewall supply register	Lattice face 1/2" square mesh sidewall supply register	Lattice face 1/2" square mesh sidewall supply register	Lattice face 1/2" square mesh sidewall return grille
neck	30"x4"	50"x12"	32"x4"	18"x12"
airflow (cfm)	400	na	na	na
throw	14-21-30	na	na	na
pressure drop inches w.c.	.025	na	na	na
NC	<20	<20	<20	<20
applicable notes	1.2	1.2	1.2	1.2

1. Provide with white baked enamel finish unless noted otherwise. Confirm finish with architect prior to purchasing.  
2. Contractor to confirm existing opening sizes prior to purchasing air device.

## HUMIDIFIER SCHEDULE

tag	HUM1	HUM2
location	AH1 supply duct	AH2 supply duct
manufacturer (or equal)	Honeywell	Honeywell
model	TrueSTEAM HM512	TrueSTEAM HM512
capacity (gallons/day)	12.0	12.0
airflow (cfm)	1,200	1,200
oa (cfm)	0	0
duct velocity (fpm)	1420	1420
duct size	18x12	18x12
no. of manifolds	1	1
heater capacity (kw)	9	9
voltage	120v/1ph	120v/1ph
mca		
mocp	15	15
weight (lbs)		
applicable notes	1	1

1. Provide humidistat with 4-20ma output to control humidifier output. Mount 48" AFF.

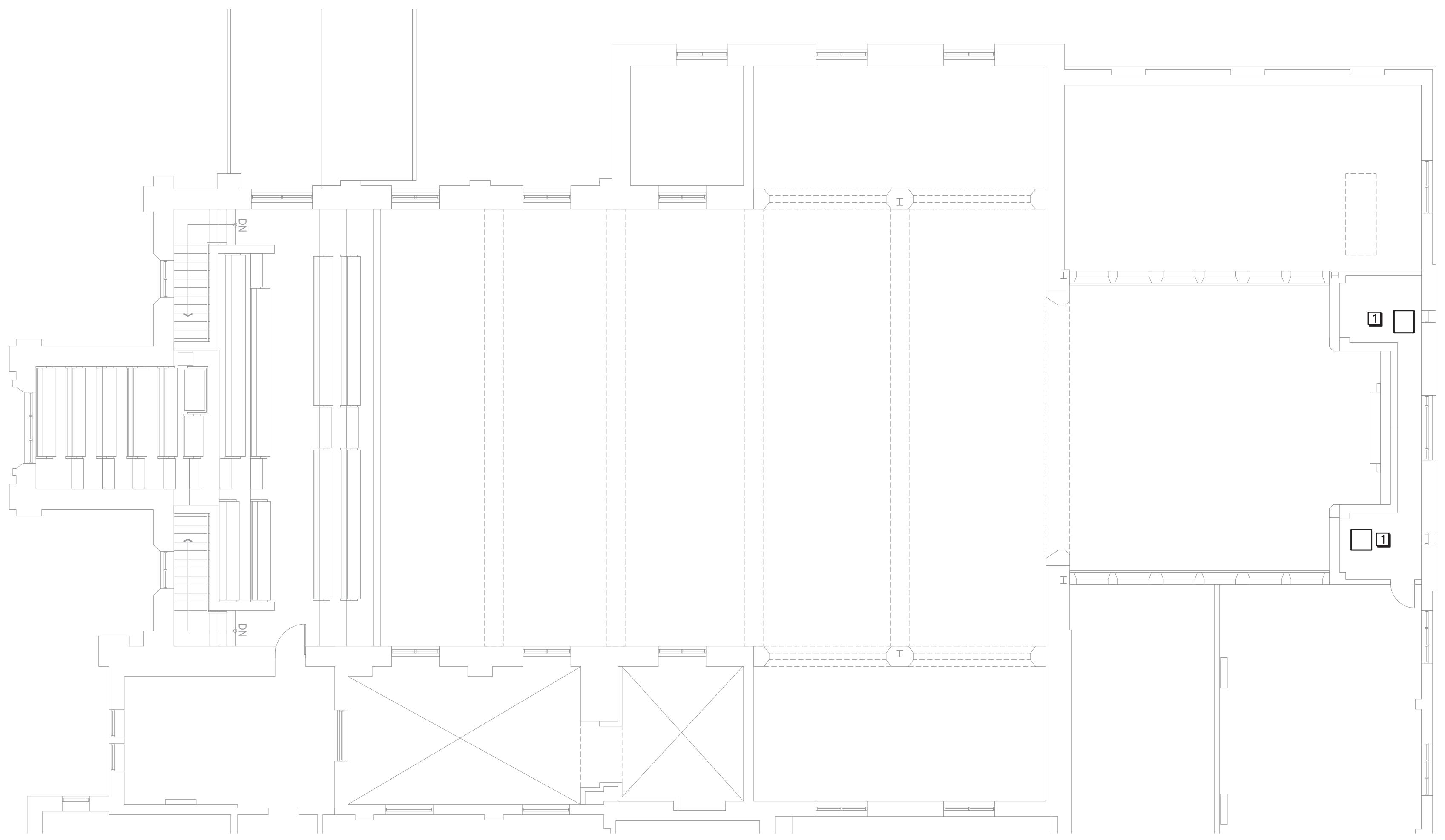
2012 APPENDIX B BUILDING CODE SUMMARY:	
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT	
<b>Method of Compliance</b>	
[X] Prescriptive [ ] Energy Cost Budget	
<b>Thermal Zone</b>	
4 Winter Dry Bulb: 16°F Summer Dry Bulb: 85°F	
<b>Interior Design Conditions</b>	
Winter Dry Bulb: 68°F Summer Dry Bulb: 75°F Relative Humidity: 50%	
<b>Building Heating Load:</b> 36.0 mbh	
<b>Building Cooling Load:</b> 6 tons, 72.0 mbh	
<b>Mechanical Spacing Conditioning System</b>	
Unitary description of unit: split system high efficiency heat pumps heating efficiency: See Schedules cooling efficiency: See Schedules heat output of unit: See Schedules cooling output of unit: See Schedules	
Boiler total boiler output. If oversized, state reason. n/a	
Chiller total chiller capacity. If oversized, state reason. n/a	
<b>List equipment efficiencies:</b> See Schedules	
<b>Equipment schedules with motors (mechanical systems)</b>	
motor horsepower: - see schedules number of phases: - see schedules minimum efficiency: - manufacturer's standard meeting ASHRAE 90.1 motor type: - manufacturer's standard # of poles: - manufacturer's standard	
<b>Outdoor Split System Compressor Condensers</b>	
5 tons or less: Outdoor air-cooled, compressor-condenser casing shall be steel, finished with manufacturer's standard baked enamel, with removable panels for access to controls, weep holes for water drainage, and mounting holes in base. Provide brass service valves, fittings, and gage ports on exterior of casing. Compressor shall be hermetically sealed, scroll type, with crankcase heater and mounted on vibration isolator device. Compressor motor shall have thermal- and current-sensitive overload devices, start capacitor, relay, and contacts. Refrigerant shall be R-410A. Refrigerant coil shall be copper tube, with mechanically bonded aluminum fins and liquid subcooler and comply with ARI 206/110. Heat-pump components shall include reversing valve and low-temperature-air cutoff thermostat. Fan shall be aluminum-propeller type, directly connected to motor. Fan motor shall be permanently lubricated, with integral thermal-overload protection. Low ambient kit shall permit operation down to 45 deg F. Ground mounting base shall be 4 inch thick reinforced concrete pan. Roof mounting kit shall be 6 inch high rails installed in accordance with roof manufacturer's recommendations. Refrigerant line kits shall be soft-annealed copper suction and liquid lines factory cleaned, dried, pressurized, and sealed; factory-insulated suction line with flared fittings at both ends.	
6 tons or more: Outdoor air-cooled, compressor-condenser casing shall be steel, finished with manufacturer's standard baked enamel, with removable panels for access to controls, weep holes for water drainage, and mounting holes in base. Provide brass service valves, fittings, and gage ports on exterior of casing. Compressor shall be hermetically sealed, scroll type, with crankcase heater and mounted on vibration isolator device. Compressor motor shall have thermal- and current-sensitive overload devices, start capacitor, relay, and contacts. Refrigerant shall be R-410A. Refrigerant coil shall be copper tube, with mechanically bonded aluminum fins and liquid subcooler and comply with ARI 206/110. Heat-pump components shall include reversing valve and low-temperature-air cutoff thermostat. Fan shall be aluminum-propeller type, directly connected to motor. Fan motor shall be permanently lubricated, with integral thermal-overload protection. Low ambient kit shall permit operation down to 45 deg F. Ground mounting base shall be 4 inch thick reinforced concrete pan. Roof mounting kit shall be 6 inch high rails installed in accordance with roof manufacturer's recommendations. Refrigerant line kits shall be soft-annealed copper suction and liquid lines factory cleaned, dried, pressurized, and sealed; factory-insulated suction line with flared fittings at both ends.	
<b>Installation:</b> All work and materials shall be in accordance with the applicable sections of the N.C. Building Code and local codes and ordinances. Equipment and materials shall be installed in compliance with manufacturer's installation recommendations and acceptable industry standards. The mechanical contractor is responsible for verifying existing conditions and dimensions before beginning work. Perform all work in a neat workman-like manner and in accordance with industry standards.	
1. Provide outdoor unit with anti-shutdown timer, evaporator defrost control, rubber isolator kit and crankcase heater.	
2. Provide 7-day programmable thermostat/humidistat with night setback and alarm display. Mount 48" AFF.	
3. Provide single point power connection to indoor air handler.	
4. Provide service access to unit per code and manufacturer's recommendation.	
5. Provide flexible duct connections to unit at supply and return mains.	
6. Route condensate to floor drain, hub drain or dry well - see plans.	
7. Provide auxiliary drain pan beneath unit extending 6" beyond air handler in all directions. Provide a float switch interlocked with the unit set shut down the unit and signal an alarm on the thermostat display.	

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MECHANICAL NOTES  
AND SCHEDULES

DRAWING NO.

M1

KGA PROJECT NO. 1103.03

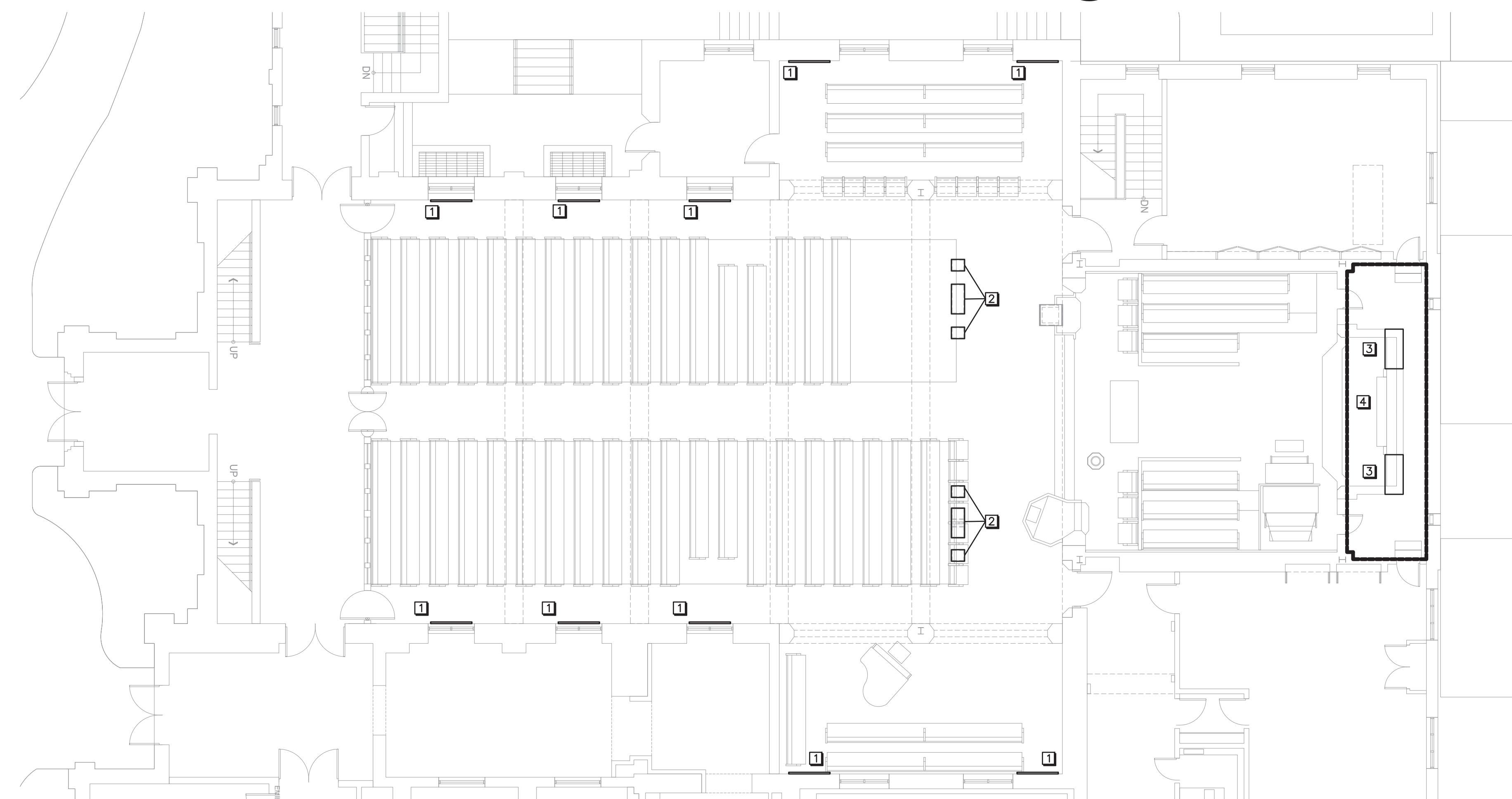


BALCONY LEVEL  
2 MECHANICAL DEMO PLAN  
M2  
SCALE: 1/8" = 1'-0"

KEYED MECHANICAL DEMO NOTES

- 1 REMOVE EXISTING AIR HANDLING UNIT, DUCTWORK, CHILLED WATER AND STEAM PIPING AND CONTROLS. CAP PIPING AT FLOOR.

105 NORTH MAPLE AVENUE,  
SUITE 200 FALLS CHURCH,  
VIRGINIA 22046-4713  
TEL 703.528.1150 FAX 703.528.1151



MAIN LEVEL  
1 MECHANICAL DEMO PLAN  
M2  
SCALE: 1/8" = 1'-0"

KEYED MECHANICAL DEMO NOTES

- 1 REMOVE SIDEWALL SUPPLY GRILLES. CLEAN ACCESSIBLE DUCT WORK AT GRILLE.
- 2 REMOVE PERFORATED COVERS ON RETURN GRILLES. CLEAN GRILLES AND ACCESSIBLE DUCTWORK.
- 3 REMOVE SIDEWALL SUPPLY GRILLES AND DUCTWORK. GC TO PATCH WALLS.
- 4 REMOVE ALL DUCTS AND PIPING IN THIS AREA FOR INSTALLATION OF THE ORGAN. CAP ABANDONED PIPING.



3-14-2014



FIRST  
PRESBYTERIAN CHURCH  
SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

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MECHANICAL  
DEMOLITION PLANS

DRAWING NO.

M2

105 NORTH MAPLE AVENUE,  
SUITE 200 FALLS CHURCH,  
VIRGINIA 22046-4713  
TEL 703.528.1150 FAX 703.528.1151

O W N E R  
FIRST PRESBYTERIAN CHURCH  
40 CHURCH STREET  
ASHEVILLE, NC 28801  
828.253.1431 FAX 828.253.3192

S T R U C T U R A L   E N G I N E E R  
KLOESEL ENGINEERING  
8 MAGNOLIA AVENUE, SUITE 100  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.250.0780 CEL 828.231.4910

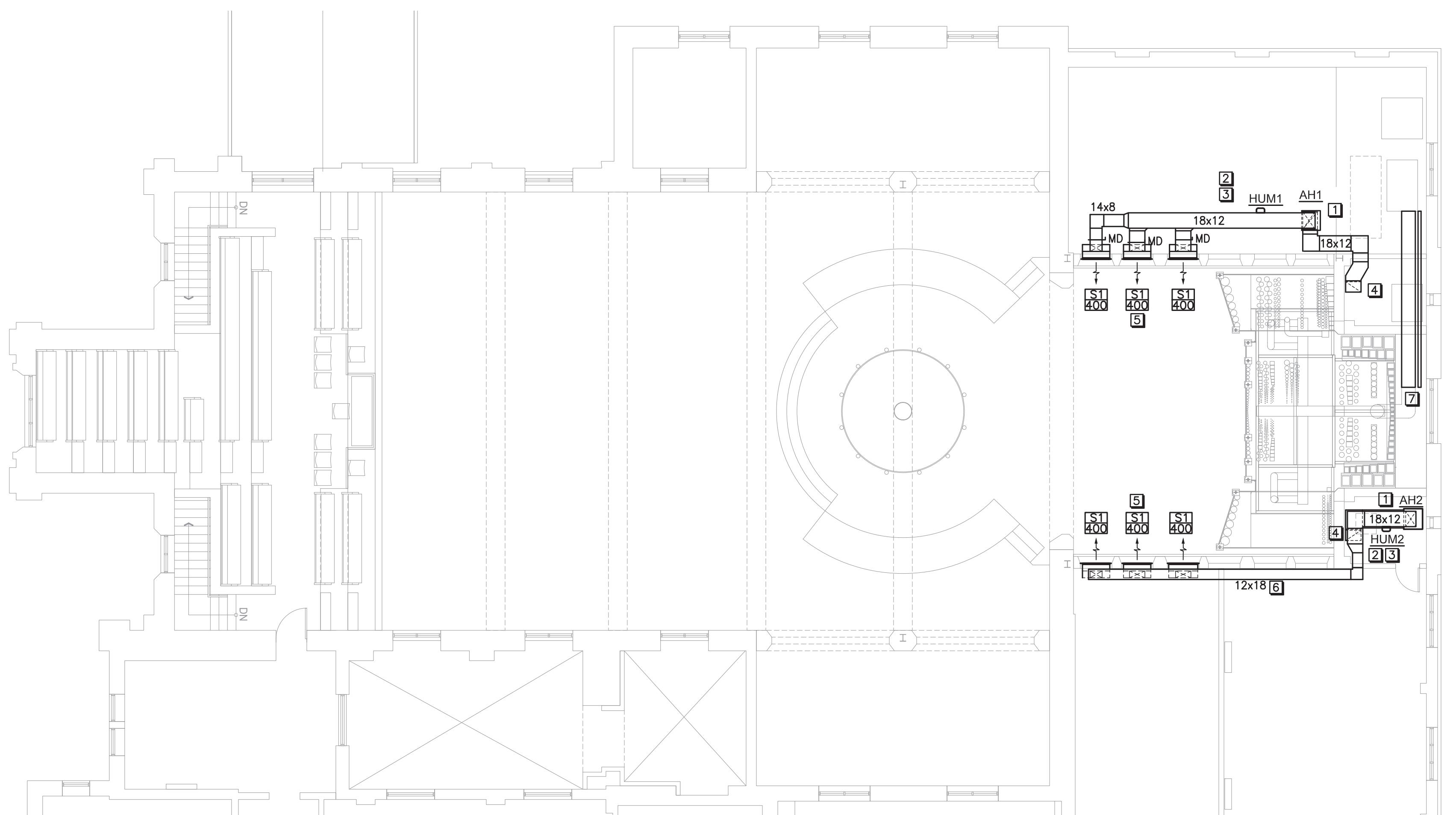
M P E   E N G I N E E R S  
TILDEN WHITE & ASSOC.  
351 MERRIMON AVENUE,  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.255.4327

A U D I O   V I S U A L   C O N S U L T A N T  
MILLER, BEAM & PAGANELLI, INC.  
12040 SOUTH LAKES DRIVE, SUITE 104  
RESTON, VIRGINIA 20191 TEL  
703.506.0005 FAX 703.506.0009

L I G H T I N G   C O N S U L T A N T  
HARTRANFT LIGHTING DESIGN  
214 WEST TREMONT AVENUE  
SUITE 500, CHARLOTTE, NC 28203  
TEL 240.731.1058

KEYED MECHANICAL NOTES

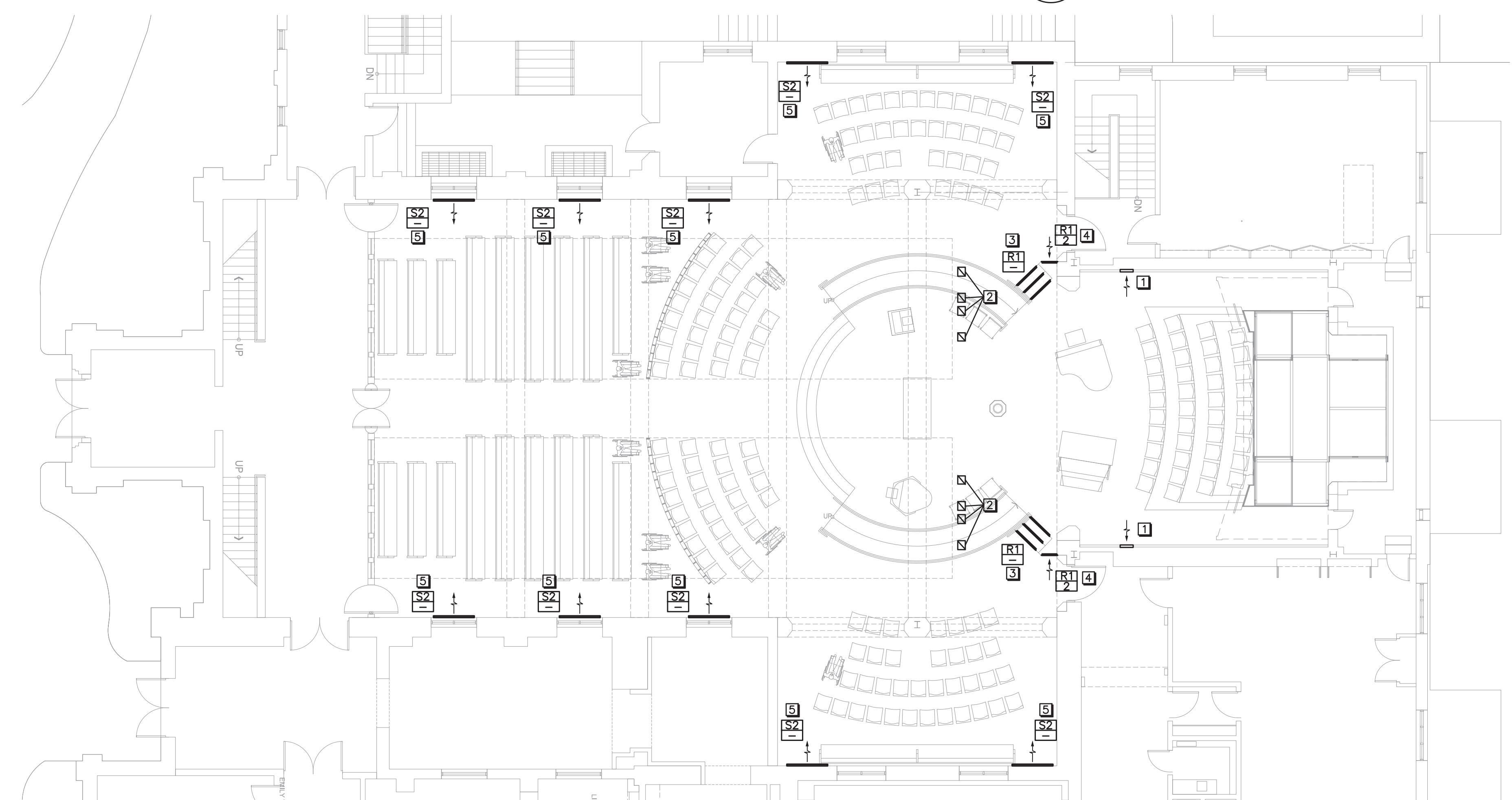
- 1 PIPE AH UNIT CONDENSATE DRAIN TO FLOOR DRAIN IN EXISTING MECHANICAL ROOM.
- 2 PIPE HUMIDIFIER DRAIN TO EXISTING FLOOR DRAIN IN EXISTING MECHANICAL ROOM.
- 3 PIPE 1/2" CW TO HUMIDIFIER FROM SOURCE ON FLOOR BELOW. CONTRACTOR TO CONFIRM ROUTING IN FIELD AND CONFIRM WITH ARCHITECT AND OWNER.
- 4 REMOVE GRILLE ON EXISTING RETURN IN FLOOR AND CONNECT RETURN DUCT.
- 5 INSTALL SUPPLY GRILLES IN BOTTOM OF EXISTING OPENINGS.
- 6 INSTALL SUPPLY DUCT IN EXISTING WALL CAVITY. PROVIDE MANUAL DAMPERS IN DUCT DROPS TO SUPPLY GRILLES.
- 7 PROVIDE STRAIGHT LENGTH OF 16"dia AND 3"dia SCHEDULE 40 PVC PIPES FOR ORGAN. COORDINATE EXACT LOCATION IN FIELD. CONNECTIONS TO ORGAN PIPES AND BLOWER BY OTHERS.
- 8 COORDINATE LOCATION OF OUTDOOR UNITS WITH ARCHITECT AND ENGINEER.



BALCONY LEVEL  
MECHANICAL PLAN

2  
M3

SCALE: 1/8" = 1'-0"



MAIN LEVEL  
MECHANICAL PLAN

1  
M3

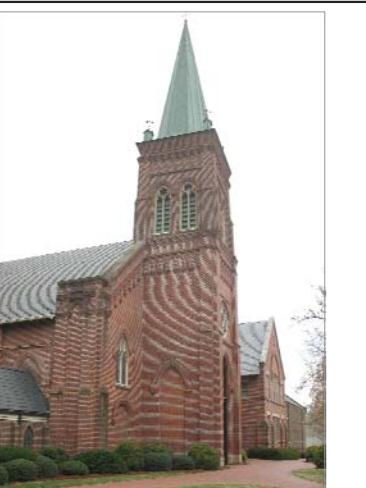
SCALE: 1/8" = 1'-0"

KEYED MECHANICAL NOTES

- 1 EXISTING WOODEN RETURN TO REMAIN AS-IS.
- 2 EXISTING FLOOR RETURNS TO REMAIN AS-IS.
- 3 RETURN GRILLES IN FACE OF STEP RISER, OPEN TO PLENUM UNDER PLATFORM.
- 4 RETURN GRILLE IN SIDE OF PLENUM.
- 5 INSTALL SUPPLY GRILLES IN EXISTING OPENINGS. (TYPICAL)



3-14-2014



FIRST  
PRESBYTERIAN CHURCH  
SANCTUARY RENOVATION

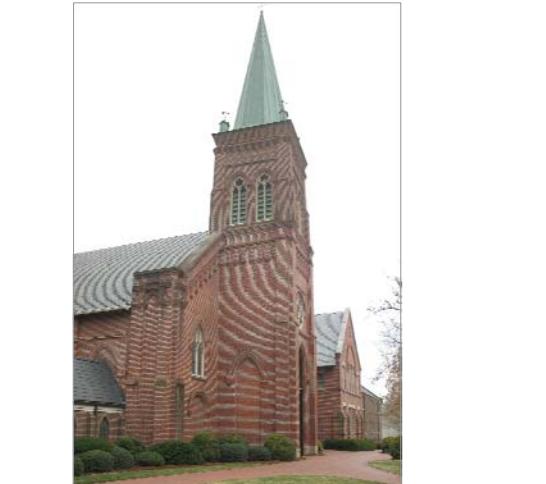
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ASHEVILLE, NORTH CAROLINA 28801

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MECHANICAL PLANS

DRAWING NO.  
**M3**



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

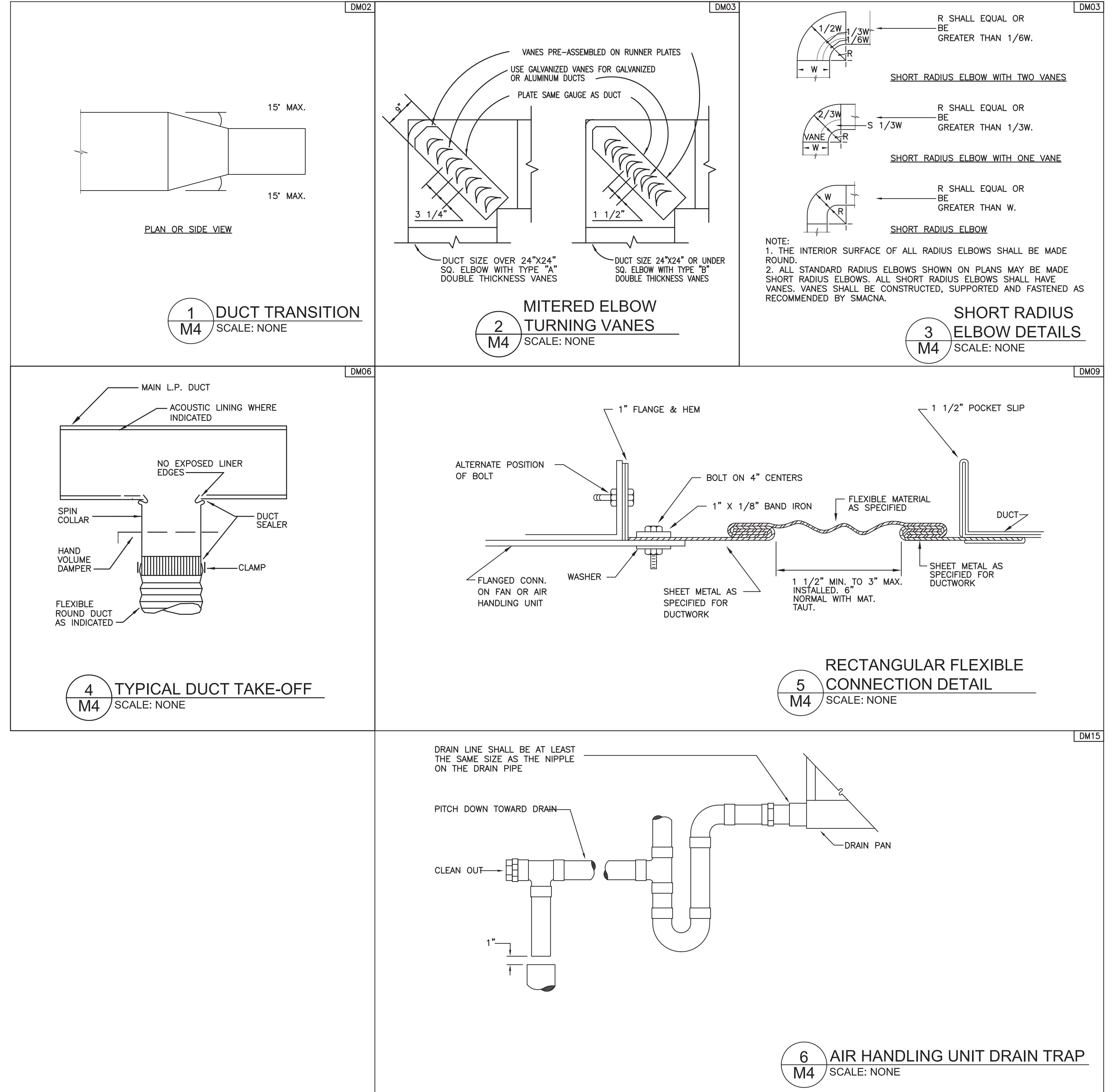
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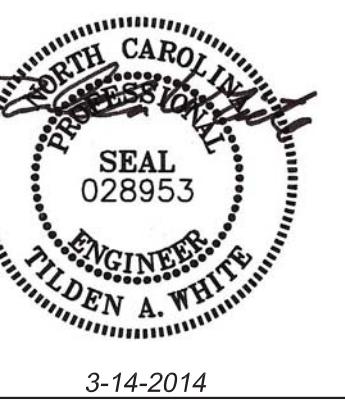
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MECHANICAL DETAILS

DRAWING NO.  
**M4**





3-14-2014

## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

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ELECTRICAL NOTES &  
DEMO PLAN

BRANCH CIRCUIT CONDUCTOR SIZING TABLE			
For circuits with branch circuit protection rated 20 amps or less, copper conductors shall be sized according to the following:			
voltage	distance (ft)	home run (AWG)	remainder (AWG)
120	0 - 50	12	12
	50 - 90	10	12
	90 - 140	8	10
	140 +	6	10
208	0 - 95	12	12
	95 - 160	10	12
	160 - 250	8	10
	250 +	6	10

2012 APPENDIX B BUILDING CODE SUMMARY: ELECTRICAL SYSTEM AND EQUIPMENT		
<b>Method of Compliance:</b>		
Prescriptive	Performance	Energy Cost Budget
<b>Lighting schedule</b>		
lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified vs. allowed (1.95 W/sf allowed space by space) total exterior wattage specified vs. allowed		
(see fixture schedule) (see fixture schedule) (see fixture schedule) (see fixture schedule) (see fixture schedule) 6 kW vs. 9 kW -		
<b>Equipment schedules with motors</b> (not used for mechanical systems)		
motor horsepower	n/a	
number of phases	n/a	
minimum efficiency	n/a	
motor type	n/a	
# of poles	n/a	

## WIRING DEVICE NOTES

- Switches shall be Hubbell CS115 or equivalent and receptacles shall be Hubbell CR20 or equivalent. Devices shall be white or as directed by architect.
- Switches shall be as follows:
 

single pole 20 amp	CSB20AC1-I
3 way 20 amp	CSB20AC3-I
4 way 20 amp	CSB20AC4-I
motor starter switch	Square D type "K" series
- Duplex receptacle shall be as follows:
 

20 amp duplex	PS5362I
20 amp duplex-GFCI	2095IL
20 amp duplex-Weather GFI	2095TRWRI

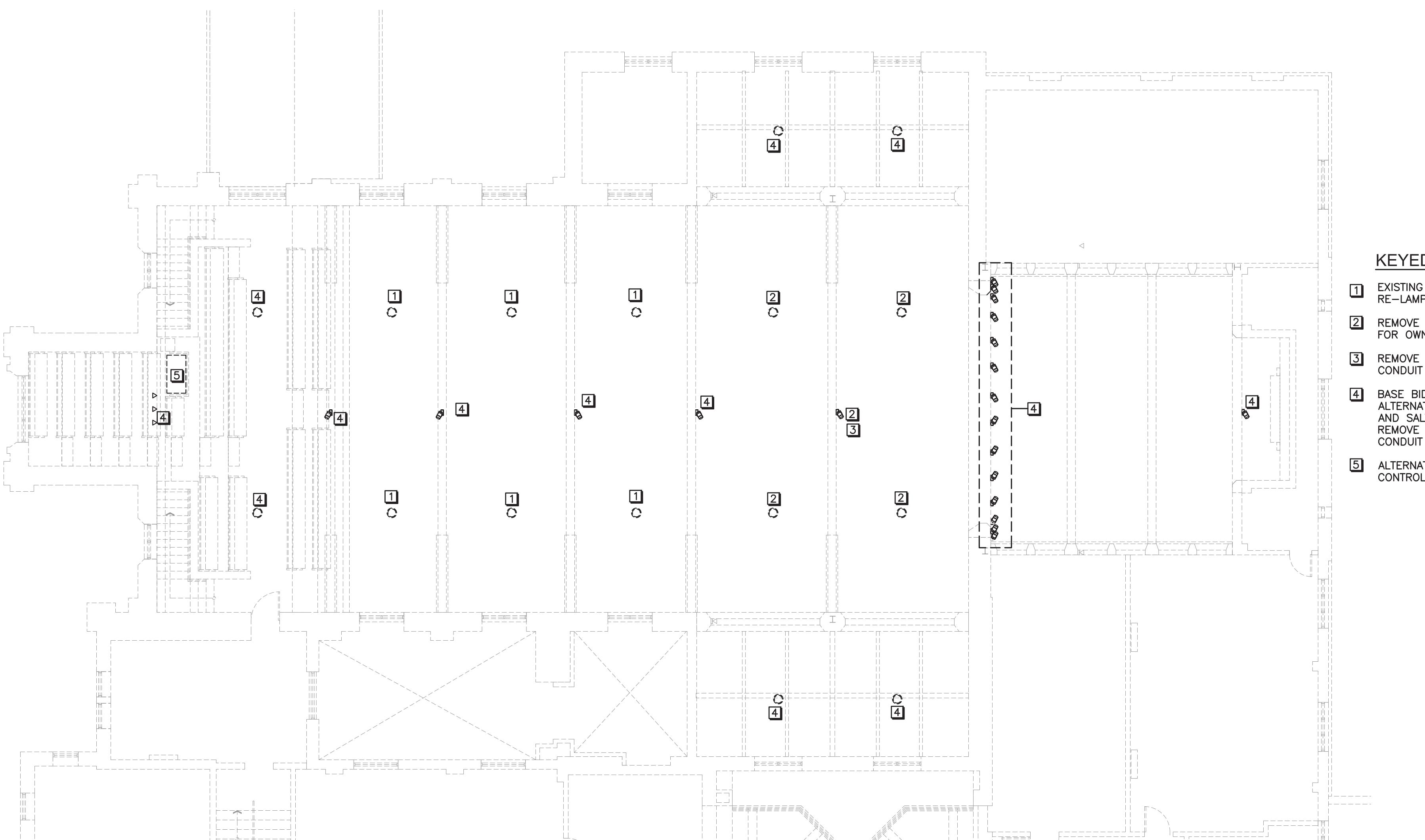
Note: Duplex receptacles have nylon face and side wire type. Receptacles shall have brass contacts, brass terminal screws and green ground wire screw. GFCI receptacle shall be included with a trip indicator light.
- Coverplates shall be oversized stainless steel SSJX or as directed by architect.
- Outlet boxes shall not be mounted back-to-back.
- Receptacles shall be 20 amp unless 15 amp is required by equipment served.
- Weatherproof in use covers shall be clear equal to Leviton. For horizontal mount covers use part no. "5977-CL". For vertical mount covers use part no. "5977-CL".
- All outlets (including telephone and data) shall have cover plates.

## ELECTRICAL NOTES

- The intent of these drawings and specifications are to describe the installation of a complete, fully adjusted, and operational system.
- Provide five sets of electrical equipment submittals to the GC for the architect, engineer, GC and owner to review and approve prior to purchasing.
- The contractor shall provide all supervision, labor, material, equipment, machinery, and any and all other items necessary to complete the system. All work shall be performed in a neat and workmanlike manner in accordance with industry standards.
- All work under this section shall be accomplished in strict accordance with state building codes and the National Electric Code. Coordinate with local power company requirements.
- The contractor shall obtain all necessary approval, obtain all permits and pay all fees required for the installation of their work.
- The drawings are diagrammatic only. The contractor may need to make field adjustments to accommodate actual field conditions.
- Devices located in rated walls shall have sufficient separation from other devices to allow proper installation and firestopping.
- The contractor shall refer to the architectural and structural drawings for the general construction of the building, for floors and ceiling heights, for locations of wall, partitions, beams, etc.
- Manufacturer's listed are to establish a standard of quality and not intended to limit the selection to these manufacturers.
- Contractor shall verify all listed model numbers with manufacturers to insure proper application of equipment.
- Equipment and materials shall be handled, stored and protected in accordance with the manufacturer's recommendations.
- The contractor shall perform any and all trenching, excavation and backfilling required for the installation of this work.
- The contractor shall furnish all necessary scaffolding, staging, rigging and hoisting required for the completion of this work.
- All work shall be coordinated with the general contractor and other trades involved in the construction project. All work shall be carefully laid out in advance to coordinate architectural, structural, mechanical, plumbing and electrical features of construction.
- The electrical contractor shall visit the site before submitting his bid so as to be thoroughly familiar with the job conditions and/or peculiarities. No extra payment will be allowed for anything which could have been anticipated from a visit to the site.
- Equipment shall be installed in accordance with manufacturer's written instructions.
- Provide grounding for all conduits, motor frames, metal casings, receptacles, system neutral, etc. and as required by NEC as minimum. Resistance to ground shall not exceed 25 OHMS.
- A green insulated copper ground wire, sized per NEC, shall be installed in all raceways, electric metallic tubing used for feeders, branch circuits, flexible conduit, and as otherwise noted on the drawings.
- All fixtures shown on the plans shall be furnished and installed, complete with all mounting accessories, lamps and tubes. Fixtures shall be independently supported from structure. Coordinate closely with architectural plans for lighting schedules, dimmer schedules and other lighting requirements.
- All wiring shall be run in conduit. The minimum indoor conduit size shall be 1/2". Indoor conduit shall be electrical metallic tubing or type MC may be used for branch circuits where allowed by NEC and not subject to physical damage, moisture or dampness. Connection to equipment shall be flexible metal conduit except in wet or damp locations use liquid tight flexible metal conduit. Indoor boxes and enclosures shall be NEMA type 1, except in damp or wet locations use NEMA type 4, stainless steel. Where nonmetallic conduit is used below the slab provide rigid conduit to turn up into the building space or at all exterior walls, poles or equipment. Use raceway fittings compatible with raceway and suitable for use and location. Run concealed raceways with a minimum of bends in the shortest practical distance considering the type of building construction and obstructions. Raceways shall run parallel to or at right angles to nearby surfaces or structural members, and follow the surface contours as much as practical. Provide grounding connections for raceway, boxes, and components as indicated and instructed by manufacturer. Tighten connections and terminals, including screws and bolts, according to equipment manufacturer's published torque-lightening values for equipment connectors. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals according to tightening torques specified in UL standard 486A.
- Color for devices shall be coordinated with the general contractor.
- Receptacles shall comply with UL Standard 438, "electrical attachment plugs and receptacles," heavy-duty grade 20 AMP rated except as otherwise indicated.
- Ground-fault circuit interrupter (GFI) receptacles shall comply with UL Standard 943, "Ground fault circuit interrupters," with integral NEMA 5-20R duplex receptacles.
- Single pole and three/four-way toggle type snap switches shall be 20 AMP 120/277 V. AC, rated, quick-type A.C. switches. NRTL listed and labeled as complying with UL Standard 20 "general use snap switches," and with federal specification W-S-896.
- Wall plates: single and combination types shall be 302 stainless steel that mate and match with corresponding wiring devices.
- Conductors shall be color coded in accordance with NEC as follows:

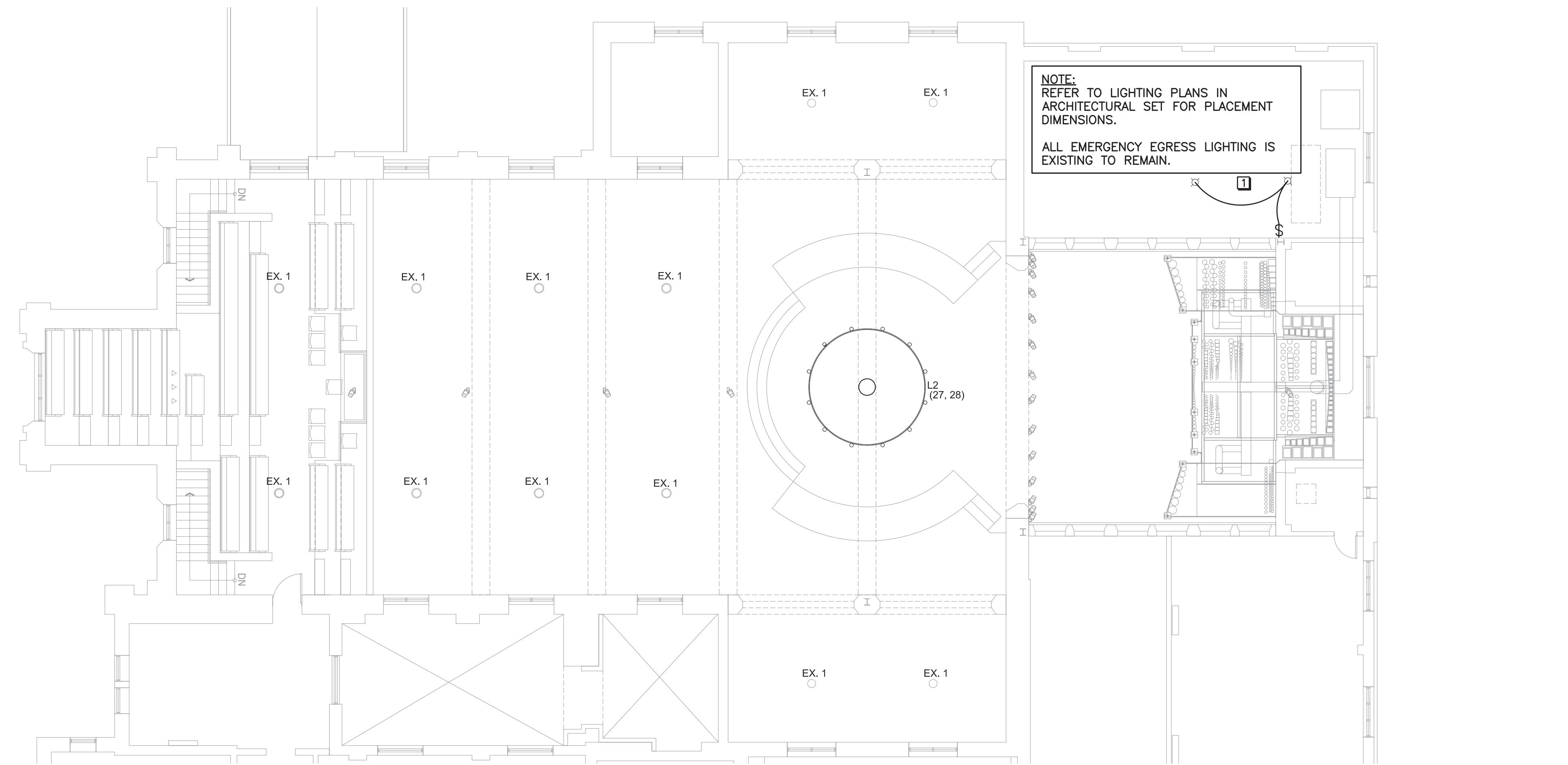
Phase	208/120 Volts	480/277 Volts
A	Black	Brown
B	Red	Orange
C	Blue	Yellow
Neutral	White	Gray
Ground	Green	Green

- Electrical equipment shall be identified with labels of engraved plastic-laminate on each major unit of electrical equipment.
- Panelboards/loadcenters shall be type, rating, and features as indicated on the schedules. Enclosures shall be NEMA type 1, flush or surface mounted as indicated. Cabinet shall be code gauge, galvanized steel. Fronts shall be sheet steel with gray lacquer finish with hinged locking door. Ground and neutral bus shall be 100% rated. Bus shall be copper or aluminum. Main and neutral lugs shall be plug-on type. Equipment ground bus shall be adequate for feeder and branch-circuit equipment ground conductors bonded to box. Directory frame shall be metal, mounted inside each panel door. At the completion of this installation, type circuit designations on the directory card and leave in the card holder provided inside cabinet doors. Tandem circuit breakers shall not be used. Multi-pole breakers shall have common trip. The minimum interrupting rating for circuit breakers rated at 120/240 volts shall be 22,000 AMPS RMS symmetrical. For flush mounted panels provide a minimum of (4)-1" conduits stubbed to the ceiling space for future use.
- All wiring for equipment shall be copper with one of the following types of insulation: THW, THHW, THWN with a rating of at least 75 DEG. C. All wiring located above the ceiling shall be plenum-rated.
- Final locations of all exit and emergency lights shall be verified with the building inspector prior to installation.
- Branch circuits shall not exceed 80% of overcurrent protection. Devices shall be relocated to another circuit if found to be in excess of 80%.



1 DEMO PLAN  
E1 SCALE: 1/8" = 1'-0"

E1



BALCONY LEVEL  
LIGHTING PLAN - BASE BID  
2 E2  
SCALE: 1/8" = 1'-0"

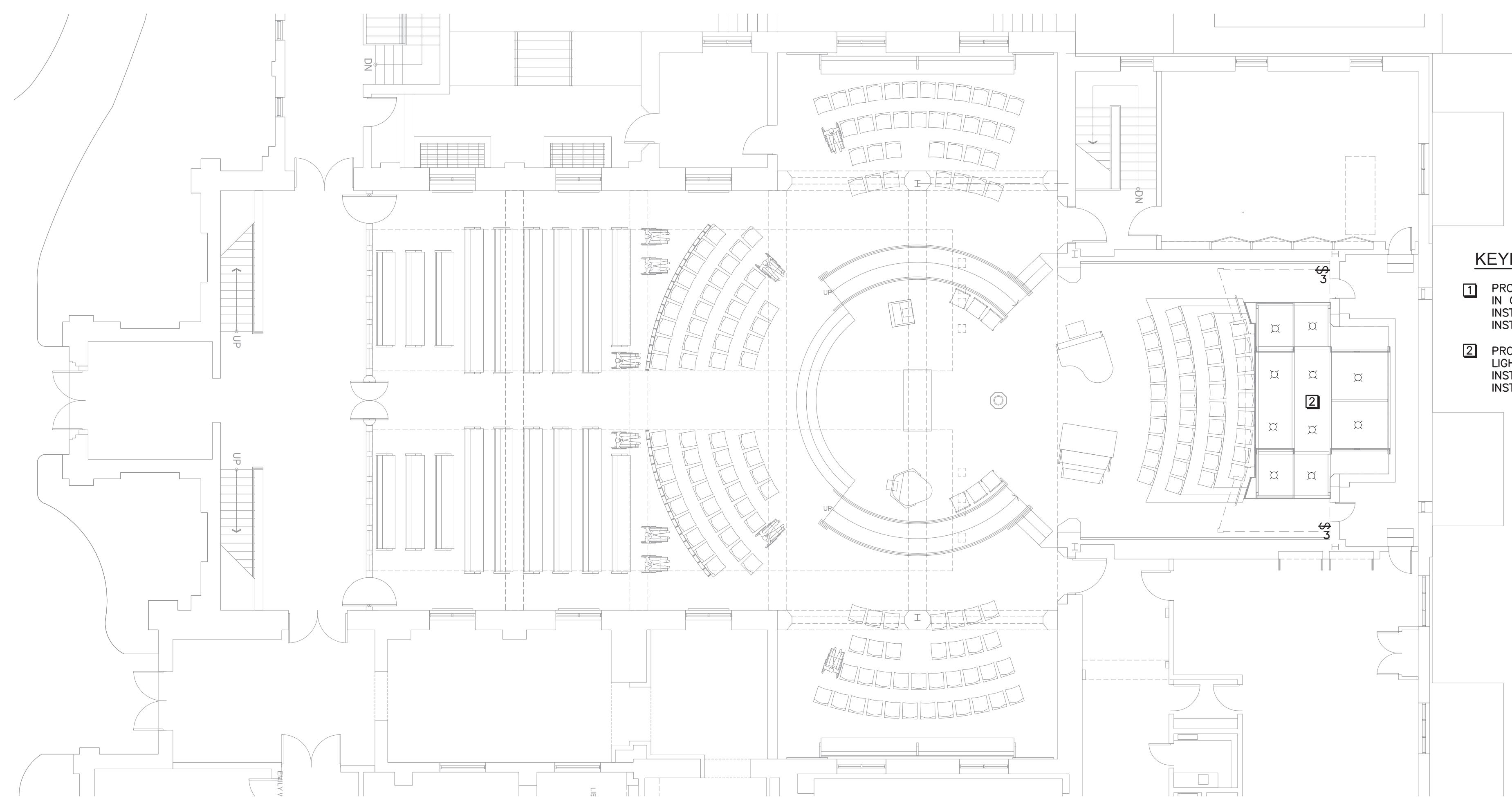


3-14-2014



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801



MAIN LEVEL  
LIGHTING PLAN  
1 E2  
SCALE: 1/8" = 1'-0"

DRAWING NO.  
**E2**

O W N E R  
FIRST PRESBYTERIAN CHURCH  
40 CHURCH STREET  
ASHEVILLE, NC 28801  
828.253.1431 FAX 828.253.3192

S T R U C T U R A L E N G I N E E R  
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8 MAGNOLIA AVENUE, SUITE 100  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.250.0780 CEL 828.231.4910

M P E E N G I N E E R S  
TILDEN WHITE & ASSOC.  
351 MERRIMON AVENUE,  
ASHEVILLE, NORTH CAROLINA 28801  
TEL 828.255.4327

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12040 SOUTH LAKES DRIVE, SUITE 104  
RESTON, VIRGINIA 20191 TEL  
703.506.0005 FAX 703.506.0009

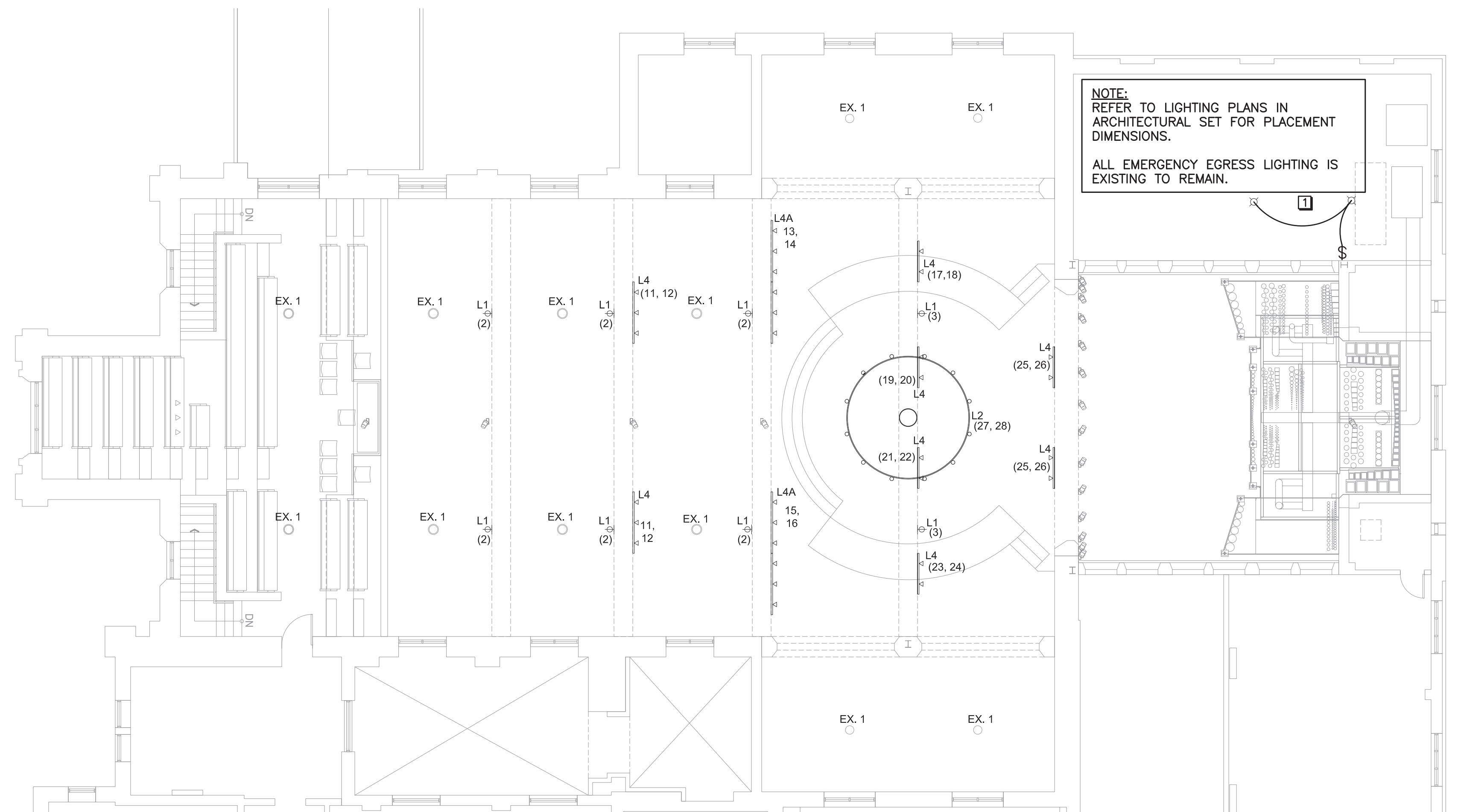
L I G H T I N G C O N S U L T A N T  
HARTRANFT LIGHTING DESIGN  
214 WEST TREMONT AVENUE  
SUITE 500, CHARLOTTE, NC 28203  
TEL 240.731.1058

### KEYED LIGHTING NOTES

- ① PROVIDE CIRCUITING FOR TWO (2) WORK LIGHTS IN CHANCEL BLOWER ROOM TO BE PROVIDED, INSTALLED AND LOCATED BY ORGAN INSTALLATION CREW CHIEF.
- ② PROVIDE CIRCUITING FOR TEN (10) WORK LIGHTS INSIDE ORGAN CASE TO BE PROVIDED, INSTALLED AND LOCATED BY ORGAN INSTALLATION CREW CHIEF.

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
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**LIGHTING PLANS  
BASE BID**



1 E3 LIGHTING PLAN - ALT 4A

SCALE: 1/8" = 1'-0"



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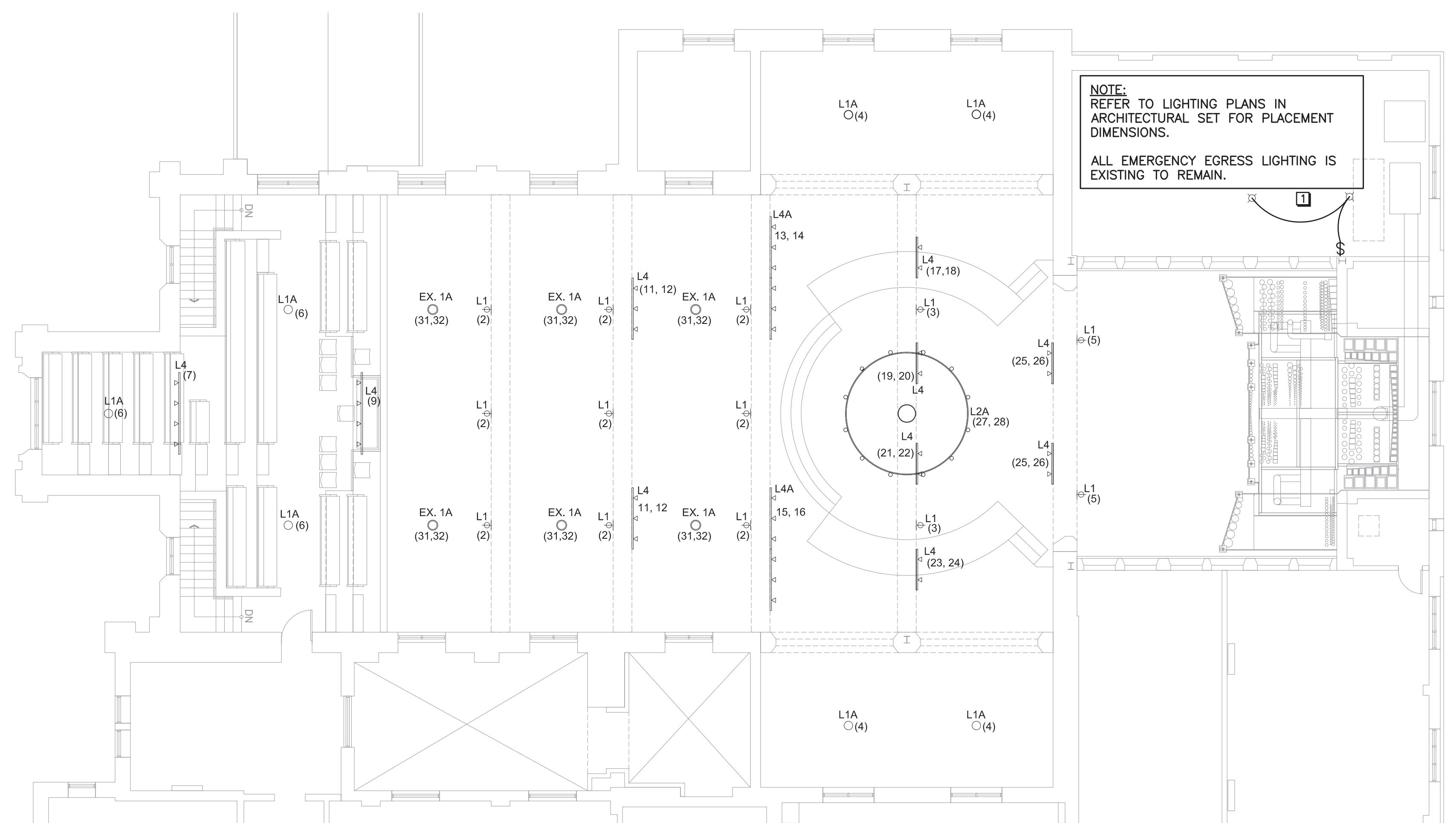


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LIGHTING PLANS  
ALT 4A & 4B

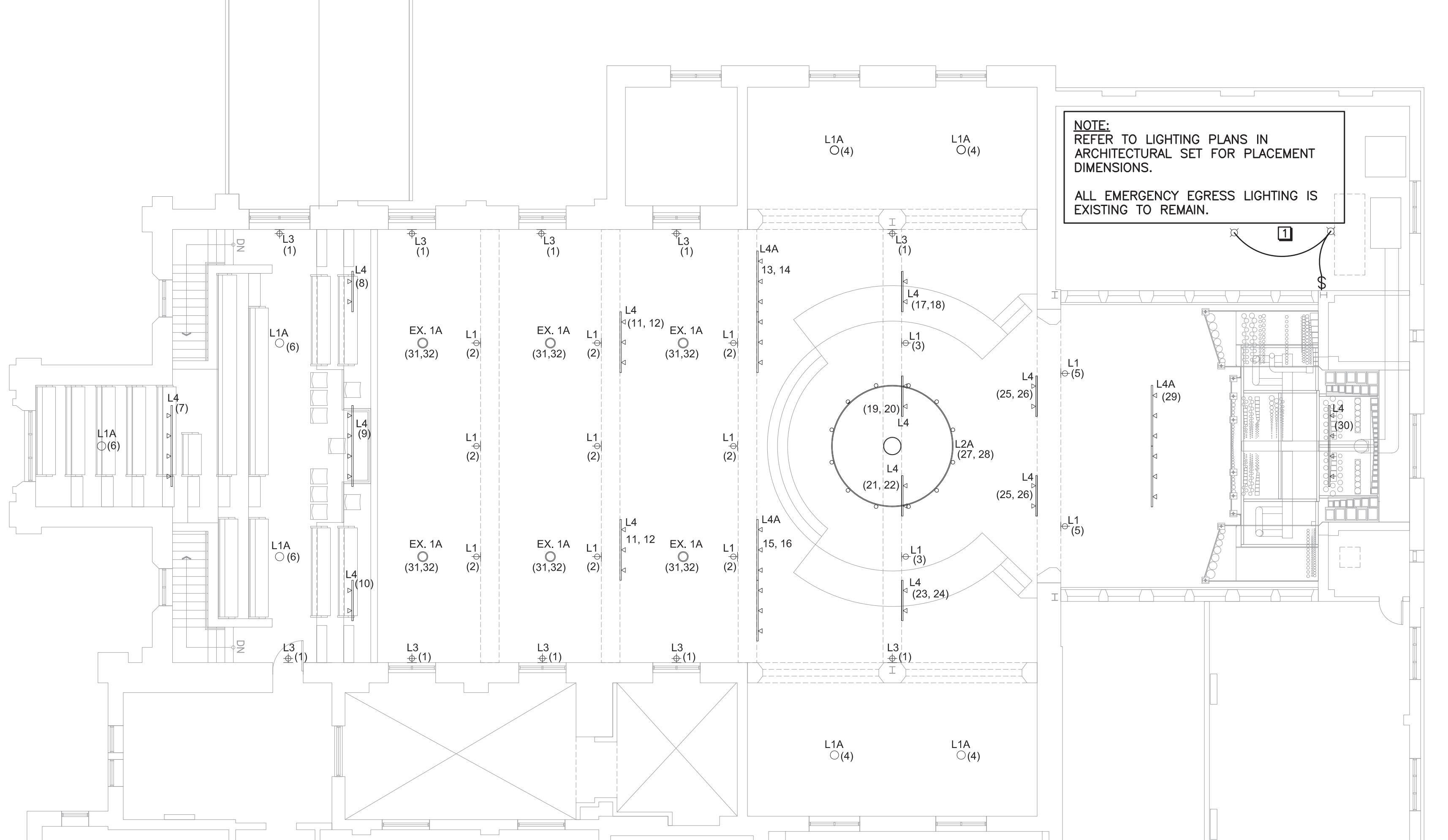


2 E3 LIGHTING PLAN - ALT 4B

SCALE: 1/8" = 1'-0"

DRAWING NO.

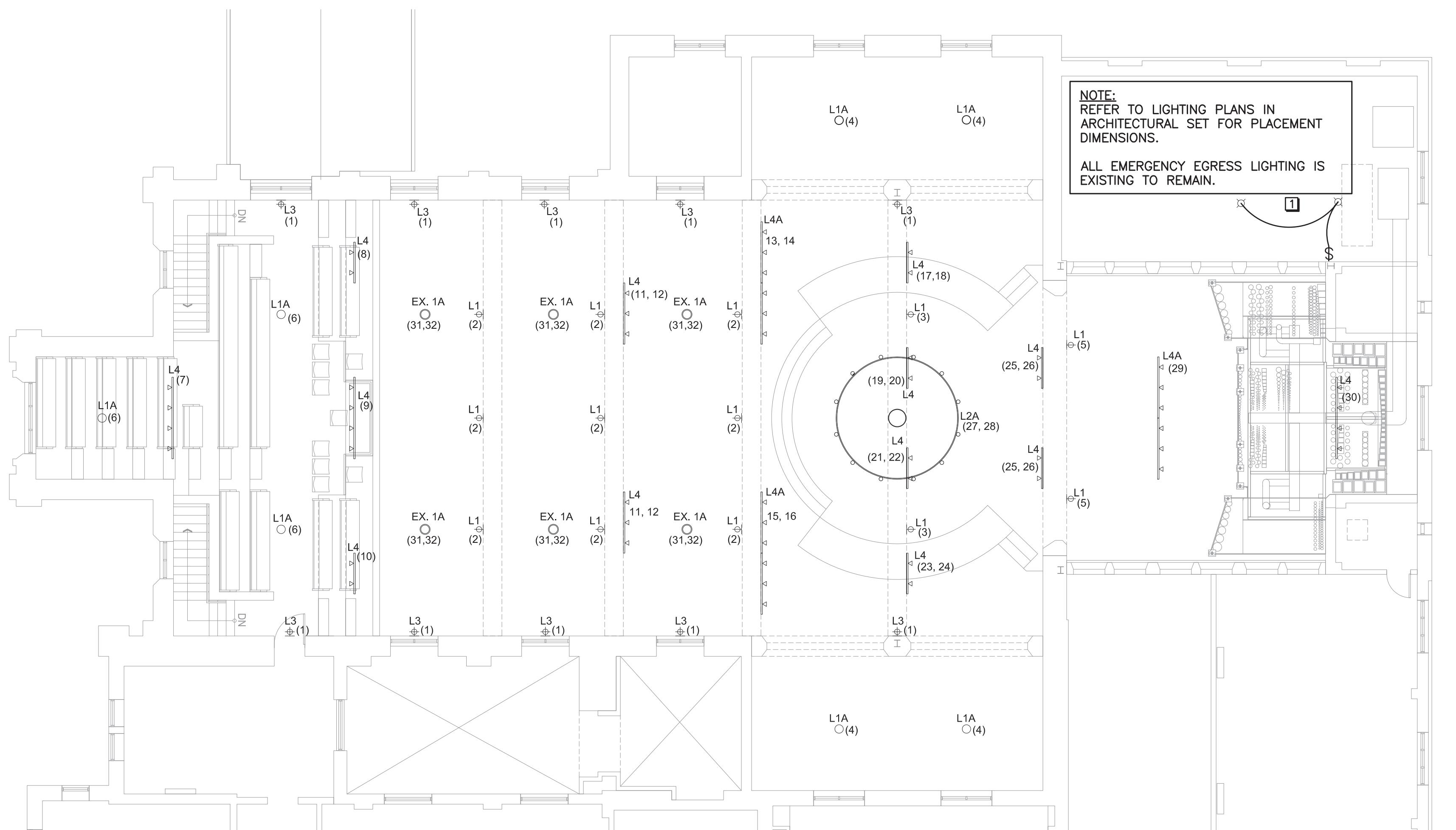
E3



1 E4 LIGHTING PLAN - ALT 4C  
SCALE: 1/8" = 1'-0"



3-14-2014



BID ALTERNATE NO. 4D -

UPGRADE LIGHTING CONTROL. THE BASE BID SHALL INCLUDE CONTINUED USE OF THE EXISTING DIMMING PANEL FOR EXISTING FIXTURES, PLUS LIGHTOLIER MULTISSET PRO LIGHTING CONTROL FOR CHANDELIER (L2); LOCATE (I) THE MASTER CONTROLLER IN THE SAME ROOM, (II) ONE REMOTE STATION IN THE CHANCEL AT THE EXISTING PULPIT, AND (III) ONE R/S AT THE SOUTH ENTRY TO THE NAVE. AS A BID ALTERNATE, SUBSTITUTE THE LUTRON LCP128 EXPANDABLE DIMMING SYSTEM INSTEAD OF REUSING THE EXISTING DIMMING SYSTEM AND INSTEAD OF INSTALLING THE LIGHTOLIER MULTISSET PRO; INCLUDE THE APPROPRIATE NUMBER OF MODULES TO SUPPORT THE ADDED CIRCUITS IN EACH OPTION AND INCLUDE WIRELESS CONTROLS AS FOLLOWS: MASTER CONTROLLER AT THE A/V STATION, REMOTE SCENE SELECTORS CHANCEL AND SOUTH NAVE ENTRY, AND ON/OFF STATIONS AT FIVE ADDITIONAL LOCATIONS AS INDICATED.

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LIGHTING PLANS  
ALT 4C & 4D

DRAWING NO.  
E4

O W N E R  
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HARTRANFT LIGHTING DESIGN  
214 WEST TREMONT AVENUE  
SUITE 500, CHARLOTTE, NC 28203  
TEL 240.731.1058



FIRST  
PRESBYTERIAN CHURCH  
SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

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2 E4 LIGHTING PLAN - ALT 4D  
SCALE: 1/8" = 1'-0"



## FIRST

## PRESBYTERIAN CHURCH SANCTUARY RENOVATION

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LIGHTING FIXTURE &  
DIMMER SCHEDULES

DRAWING NO.

E5

KGA PROJECT NO. 1103.03

ARCHITECTURAL LIGHTING FIXTURE SCHEDULE										REVISION:					
PROJECT: FIRST PRESBYTERIAN - ASHEVILLE, NC					PROJECT #: 03/10/14										
<b>NOTES</b>															
1 SHOULD THE CONTRACTOR WISH TO HAVE PRODUCTS OTHER THAN THOSE SPECIFIED CONSIDERED, THE ITEMS MUST BE SUBMITTED (14) DAYS IN ADVANCE OF THE BID. FAILURE TO SUBMIT WITHIN THAT DEADLINE CONSTITUTES A GUARANTEE THAT THE SPECIFIED PRODUCTS WILL BE SUPPLIED.															
2 CONTRACTOR SHALL PROVIDE A COMPLETE LIST OF ALL LAMPS WHICH WILL BE FURNISHED ON THE PROJECT. THIS LIST SHALL BE ORGANIZED ALPHABETICALLY BY LUMINAIRE TYPE INDICATED ON THE LUMINAIRE SCHEDULE, AND INCLUDE THE MANUFACTURER AND EXACT MODEL ORDERING CODE OF EACH LAMP.															
3 THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL 10% OF ALL LAMPS LISTED AT PROJECT TURN OVER. LAMPS ARE FOR SPARE REPLACEMENT LAMPS. LIST OF SPARE LAMPS TO BE INCLUDED IN SUBMITTAL DOCUMENTATION.															
4 ALL EMERGENCY AND EXIT LIGHTING SHALL BE DESIGNED AND SPECIFIED BY THE ELECTRICAL ENGINEER															
5 CONFIRM WITH ARCHITECT THE EXACT MOUNTING HEIGHT AFF															
6 CONTRACTOR MUST PROVIDE UNIT PRICING TO THE ARCHITECT- FOR EACH FIXTURE TYPE COMPLETE WITH ALL ACCESSORIES AND LAMP.															
FIXTURE TYPE	DESCRIPTION	LAMP	MANUFACTURER	CATALOG NUMBER	SYSTEM WATTS	VOLTS	CONE	APER. SIZE	SURFACE	MOUNTING	NOTES				
EX1	EXISTING PENDANTS	PHILIPS 19A21/2700WHT DIM 6/1 25,000HRS, 1680 LUM, 2700K	BLACK MOUNTAIN IRON WORKS	38	BYEE	NA	NA	X			EXISTING FIXTURE SHALL BE REFURBISHED, REWIRED, AND RELAMPED. FIXTURE CONSISTS OF AN ORIGINAL CYLINDER AND A HORIZONTAL RING, ATTACHED AT A LATER DATE, AT MULTIPLE WELD POINTS. HORIZONTAL RING SHALL BE REMOVED, KEEPING ORIGINAL CYLINDER INTACT TO BE REUSED IN THE EXISTING LOCATIONS. CUTS AT WELD POINTS SHALL BE PROPERLY REPAIRED TO MINIMIZE VISIBLE DAMAGE. -BASE BID				
EX1A	PENDANTS FOR TASK LIGHTING	PHILIPS 19A21/2700WHT DIM 6/1 25,000HRS, 1680 LUM, 2700K	BLACK MOUNTAIN IRON WORKS	38	BYEE	NA	NA	X			LED FIXTURE TO MATCH FEATURES OF ORIGINAL EXISTING PENDANTS CONSISTING OF TINTED CYLINDER PENDANT WITH IRON DETAILING -BID ALTERNATE NO. 4B				
L1	HIGH OUTPUT LED CYLINDER - TRUSS MOUNTED	126W, 9000 LUMENS, 3000K, 50,000 HRS LED INCLUDED	PRESCOLITE HUBBELL	MC10LEDS9L30KMD25SS	126W	BYEE	NA	NA	X		PROVIDE WITH FABRICATED SIDE MOUNTING ARM 0 - 10V DIMMING. CONFIRM FINISH -BID ALT. NO. 4A INCLUDE 5 FIXTURES ABOVE HAVE SEATING NOTED CIRCUITS #2. FOR BID ALT. NO. 4B INCLUDE REMAINING FIXTURES ABOVE EXTENDED CHANCEL AND CENTER OF NAVE NOTED CIRCUITS #2 AND #3				
L1 ALT 1	HIGH OUTPUT LED CYLINDER - WALL MOUNTED	100W, 90 CRI, 50,000 HR 3000K, 7085 DELIVERED LUMEN, LED INCLUDED	CREE	ESA C10 NDSW 56 D U BK SSGC C 30K	100W	BYEE	NA	NA	X		0 - 10V DIMMING. CONFIRM FINISH				
L1 ALT 2	HIGH OUTPUT LED CYLINDER - WALL MOUNTED	95W, 85 CRI, 50,000 HR 3000K 6367 DELIVERED LUMENS, LED INCLUDED	GOTHAM	ICO CYL 30/60 GAR LD 20 WM DBL	95W	BYEE	NA	NA	X		0 - 10V DIMMING - CONFIRM ONBOARD SENSOR REQUIREMENTS. CONFIRM FINISH				
L1A	HIGH OUTPUT LED CYLINDER - PENDANT MOUNTED	126W, 9000 LUMENS, 3000K, 50,000 HRS LED INCLUDED	PRESCOLITE HUBBELL	MC10LEDP9L30KMD25SS	126W	BYEE	NA	NA	X		PROVIDE WITH FABRICATED SIDE MOUNTING ARM 0 - 10V DIMMING. CONFIRM FINISH -BID ALT. NO. 4B INCLUDE ALL PENDANT MOUNTED L1A FIXTURES NOTED CIRCUITS #4 AND #6				
L1A ALT 1	HIGH OUTPUT LED CYLINDER - PENDANT MOUNTED	100W, 90 CRI, 50,000 HR 3000K, 7085 DELIVERED LUMEN, LED INCLUDED	CREE	ESA C10 NDP 56 D U BK SSGC C 30K	100W	BYEE	NA	NA	X		0 - 10V DIMMING. CONFIRM FINISH				
L1A ALT 2	HIGH OUTPUT LED CYLINDER - PENDANT MOUNTED	95W, 85 CRI, 50,000 HR 3000K 6367 DELIVERED LUMENS, LED INCLUDED	GOTHAM	ICO CYL 30/60 GAR LD 20 PM DBL	95W	BYEE	NA	NA	X		0 - 10V DIMMING - CONFIRM ONBOARD SENSOR REQUIREMENTS. CONFIRM FINISH				
L2	STANDARD WROUGHT IRON 12 DIAM ROUND WITH AMBER GLASS CYLINDERS ON APPROX'3 SPACING.	ASSUME 12 LIGHTED CYLINDERS EACH WITH 15W LED LAMPS.	NEIDHARDT	BENTFIELD LT51-B	TBD	ASSUME 1200W	BYEE	NA	NA	X	CONFIRM MOUNTING HEIGHT. PROVIDE WITH MECHANICAL WINCH ASSEMBLY TO RAISE AND LOWER FIXTURE ELECTRICALLY. SOCKETS SHALL BE LABELED AS MAXIMUM 25W. CONFIRM LED DIMMING PROTOCOL. -BID ALT. NO. 4B UPGRADE CHANDELIER L2A CIRCUITS #27 AND #28 INCORPORATING EXISTING PENDANTS INTO CUSTOM DESIGN				
L2A	CUSTOM DECORATIVE CHANDELIER - WROUGHT IRON 12' DIAM ROUND WITH AMBER GLASS CYLINDERS ON APPROX'3 SPACING.	ASSUME 12 LIGHTED CYLINDERS EACH WITH 15W LED LAMPS.	BLACK MOUNTAIN IRON WORKS	TBD	TBD	ASSUME 1200W	BYEE	NA	NA	X	CONFIRM MOUNTING HEIGHT. PROVIDE WITH MECHANICAL WINCH ASSEMBLY TO RAISE AND LOWER FIXTURE ELECTRICALLY. SOCKETS SHALL BE LABELED AS MAXIMUM 25W. CONFIRM LED DIMMING PROTOCOL. -BID ALT. NO. 4B UPGRADE CHANDELIER L2A CIRCUITS #27 AND #28 INCORPORATING EXISTING PENDANTS INTO CUSTOM DESIGN				
L3	UPLIGHT	10,000 LUMEN, 134W, 50,000 HOUR LED INCLUDED	REBELLE	6001 134L 16 K DIM BM	134W	BYEE	NA	NA	X		0 - 10V DIMMING. CONFIRM FINISH. CONFIRM MOUNTING HEIGHT. -BID ALT. NO. 4C INCLUDE L3 CIRCUIT NOTED #1				



3-14-2014



## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
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POWER PLANS

DRAWING NO.

E6

KGA PROJECT NO. 1103.03

### GENERAL POWER NOTES

- ROUTE ALL NEW CONDUITS IN CONCEALED LOCATIONS (NOT VISIBLE FROM INSIDE THE SANCTUARY). IF THIS BECOMES A CHALLENGE, COORDINATE WITH THE ARCHITECT AND ENGINEER TO HELP WORK OUT A SOLUTION.
- EQUIPMENT ON THIS SHEET IS POWERED FROM NEW PANEL "O" AND CIRCUIT NUMBERS ARE IN PARENTHESIS.

### KEYED POWER NOTES

- A/V FLOOR BOX WITH DEDICATED 20A QUAD AC POWER OUTLET. FSR FL-540P (6" DEEP) OR EQUAL. INTERCONNECT ALL BOXES WITH (1) 1-1/2" CONDUIT FOR A/V. A/V CONDUIT TO HOME RUN TO A/V CONTROL DESK IN BALCONY (NOTE #5). PROVIDE CONDUIT FOR AC POWER AS REQUIRED.
- A/V/ORGAN FLOOR BOX WITH DEDICATED 20A QUAD AC POWER OUTLET. FSR FL-540P (6" DEEP) OR EQUAL. INTERCONNECT ALL BOXES WITH (1) 1-1/2" CONDUIT FOR A/V, AND (1) 1-1/2" CONDUIT FOR ORGAN. A/V CONDUIT TO HOME RUN TO A/V CONTROL DESK IN BALCONY (NOTE #5). ORGAN CONDUIT TO TERMINATE AS REQUIRED. PROVIDE CONDUIT FOR AC POWER AS REQUIRED.
- A/V WALL RACK LOCATION. PROVIDE DEDICATED 20A QUAD AC OUTLET AT 60' AFF AND (1) 1-1/2" CONDUIT TO A/V CONTROL DESK IN BALCONY (NOTE #5).
- FUTURE WALL SWITCH LOCATION FOR PROJECTION SCREEN. PROVIDE 1-GANG JUNCTION BOX AT 48" AFF WITH 1/2" CONDUIT TO FUTURE PROJECTION SCREEN LOCATION (NOTE #9).
- RELOCATED A/V CONTROL DESK LOCATION. EXTEND ALL A/V CABLEING FROM EXISTING LOCATION. PROVIDE (2) DEDICATED 20A QUAD AC OUTLETS.
- NEW WALL MOUNTED SPEAKER AT APPROX. 8' AFF. INTERCONNECT BOTH LOCATIONS WITH 1/2" CONDUIT AND HOME RUN BACK TO A/V WALL RACK BEHIND CHANCEL (NOTE #3).
- NEW WALL MOUNTED SPEAKER AT APPROX. 8' AFF. INTERCONNECT BOTH LOCATIONS WITH 1/2" CONDUIT AND HOME RUN BACK TO A/V WALL RACK BEHIND CHANCEL (NOTE #3).
- SPEAKER LOCATION. PROVIDE 1/2" CONDUIT TO A/V CONTROL DESK IN BALCONY (NOTE #5).
- FUTURE FLOOR MOUNTED PROJECTION SCREEN. PROVIDE HARD WIRED AC POWER AND 1/2" CONDUIT TO WALL SWITCH LOCATION (NOTE #4).
- INDUCTION LOOP WIRING IN FLOOR. WIRING TO HOME RUN TO A/V CONTROL DESK IN BALCONY (NOTE #5). PROVIDE 1/2" PLASTIC CONDUIT FROM CONTROL DESK TO START OF LOOP AREA.
- INDUCTION LOOP WIRING IN FLOOR BEHIND CHANCEL. WIRING TO HOME RUN TO A/V WALL RACK BEHIND CHANCEL (NOTE #3). PROVIDE 1/2" PLASTIC CONDUIT FROM WALL RACK TO START OF LOOP AREA.
- NEW WALL MOUNTED SPEAKER AT APPROX. 8' AFF. INTERCONNECT BOTH LOCATIONS WITH 1/2" CONDUIT AND HOME RUN BACK TO A/V WALL RACK BEHIND CHANCEL (NOTE #3).
- EXISTING 100A FUSE BOX TO REMAIN.
- EXISTING 1200A 208/36 SWITCHGEAR TO REMAIN. CURRENTLY IT PROVIDES POWER FOR THE SANCTUARY LIGHTING AND DIMMER PANEL. REPLACE EXISTING DIMMING SYSTEM WITH NEW AND COORDINATE WITH ARCHITECTURAL SHEETS FOR LIGHTING AND DIMMING SPECIFICATIONS. ADD A NEW 200A 208/36 BREAKER TO SERVE NEW PANEL "O" LOCATED IN THE ORGAN BLOWER ROOM.
- EXISTING LIGHTING CONTROL PANEL. REPLACE WITH NEW LIGHTING CONTROLS AS INDICATED IN ARCHITECTURAL SHEETS.
- PROVIDE ALLADIN AL1300 LIFT FOR THE CHANDELIER. COORDINATE INSTALLATION WITH ARCHITECT AND MANUFACTURER'S REQUIREMENTS.
- PROVIDE STARTER AND DISCONNECT FOR 3 HP BLOWER MOTOR. BLOWER STARTER COIL TO BE SWITCHED BY "ICE CUBE" RELAY WITH 12 VDC COIL. ORGAN BUILDER WILL CONNECT 12 VDC ORGAN RELAY TO ICE CUBE RELAY COIL. EC SHALL CONNECT STARTER TO ICE CUBE RELAY COIL. STUB IN ALL CONDUIT NOW AND COMPLETE DURING INSTALLATION. PROVIDE MOTOR STARTERS AND WIRING FOR TWO SMALL BLOWERS IN THE ANTHONIAL ORGAN.
- PROVIDE 110V 20A DEDICATED SERVICE FOR ORGAN RECTIFIERS. RECTIFIERS TO BE LOCATED IN BLOWER ROOM. SERVICE TO TERMINATE IN DUPLEX RECEPTACLE SWITCHED BY ICE CUBE RELAY WITH 12 VDC COIL. REFERENCED ABOVE IN NOTE 17. ORGAN BUILDER WILL CONNECT RECEPTACLE TO ICE CUBE RELAY COIL. RECTIFIER WILL BE PROVIDED BY ORGAN BUILDER. STUB IN NOW AND COMPLETE DURING INSTALLATION. NOTE: ITEMS 17 & 18 ARE ALWAYS USED TOGETHER. THEY ARE CONTROLLED BY A COMMON 12 VDC KEYED START/STOP SWITCH LOCATED ON THE CONSOLE AND PROVIDED BY THE ORGAN BUILDER. START/STOP SWITCH TO ACTIVATE RELAY FOR ITEMS 2 AND 3.
- PROVIDE ONE 1" CONDUIT FROM BLOWER ROOM TO BASE OF ORGAN FOR ORGAN CONTROL WIRING.
- PROVIDE TEN (10) UNSWITCHED CONVENIENCE OUTLETS INSIDE ORGAN SPACES. STUB IN NOW AND COMPLETE DURING INSTALLATION.
- PROVIDE CONDUIT AND WIRING FOR 6 LOW VOLUME FANS IN ORGAN CASE. FANS PROVIDED AND INSTALLED BY ORGAN BUILDER. STUB IN NOW AND COMPLETE WIRING DURING INSTALLATION.
- BASE BID: ADD MULTISET REMOTE STATION AT EXISTING CONTROL LOCATION.
- BID ALTERNATE #4D: PROVIDE ON/OFF SWITCH FOR LIGHTS.
- BID ALTERNATE #4D: PROVIDE WIRELESS SENSORS AT CEILING TRUSSES AS REQUIRED.

MAIN LEVEL ELECTRICAL  
POWER PLAN  
1  
E6  
SCALE: 1/8" = 1'-0"

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POWER PLANS

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KGA PROJECT NO. 1103.03



3-14-2014



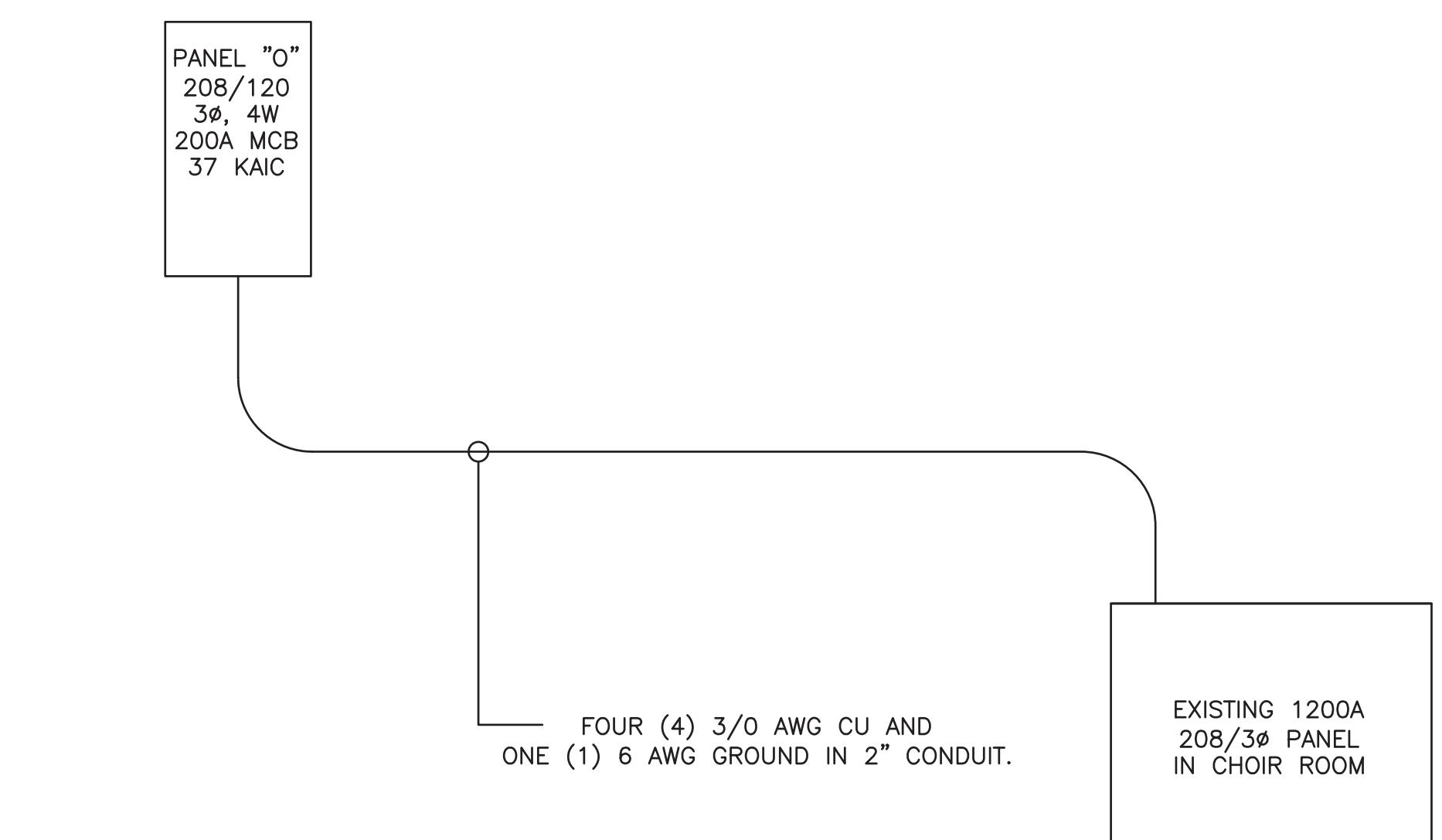
## FIRST PRESBYTERIAN CHURCH SANCTUARY RENOVATION

40 CHURCH STREET  
ASHEVILLE, NORTH CAROLINA 28801

100% DESIGN DEVELOPMENT SET 13 DEC 2013  
FOR BID / PERMIT 6 MAR 2014  
PERMIT PACKAGES 14 MAR 2014

CONSTRUCTION DOCUMENTS PHASE  
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PANEL SCHEDULE AND  
RISER DIAGRAM

LOCATION: MANUFACT.: MODEL: MOUNTING:												PANEL: O FED FROM: CHOIR RM								
CONN	VA	#	LOAD	Ph	N	G	C	BKR	A	B	C	BKR	Ph	N	G	C	LOAD	#	CONN	VA
2640	1	HP1	8	8	10	3/4	-35*	■				2P	8	-	-	-	-	4	2640	
2640	3	-	8	-	-	-	-	2P				2P	8	-	-	-	-	4	2640	
3000	5	AH1	10	10	10	3/4	25					25	10	10	10	3/4	AH1	6	3000	
3000	7	-	10	-	-	-	-	2P				2P	10	-	-	-	-	8	3000	
1000	9	HUM1	12	12	12	1/2	15					15	12	12	12	1/2	HUM1	10	1000	
1200	11	Organ Blower	12	12	12	1/2	20					20	12	12	12	1/2	KPN #5	12	1280	
1200	13	-	12	-	-	-	-	2P				20	12	12	12	1/2	KPN #5	14	1280	
1000	15	Small blower	12	12	12	1/2	20					20	12	12	12	1/2	KPN #1	16	1280	
1000	17	Small blower	12	12	12	1/2	20					20	12	12	12	1/2	KPN #1	18	1280	
500	19	Organ rectifiers	12	12	12	1/2	20					20	12	12	12	1/2	KPN #2	20	1280	
1280	21	REC - Maint.	12	12	12	1/2	20					20	12	12	12	1/2	KPN #1	22	1280	
1280	23	REC - Maint.	12	12	12	1/2	20					20	12	12	12	1/2	KPN #3	24	1280	
500	25	Organ Lights	12	12	12	1/2	20					20	12	12	12	1/2	KPN #9	26	1280	
1280	27	REC - Maint.	12	12	12	1/2	20					20	12	12	12	1/2	KPN #9	28	1280	
800	29	Organ case fans	12	12	12	1/2	20					-	-	-	-	-	SPACE	30	0	
800	31	Organ case fans	12	12	12	1/2	20					-	-	-	-	-	SPACE	32	0	
1500	33	CHANDELIER LIFT	12	12	12	1/2	20					-	-	-	-	-	SPACE	34	0	
0	35	SPACE	-	-	-	-	-					-	-	-	-	-	SPACE	36	0	
0	37	SPACE	-	-	-	-	-					-	-	-	-	-	SPACE	38	0	
0	39	SPACE	-	-	-	-	-					-	-	-	-	-	SPACE	40	0	
0	41	SPACE	-	-	-	-	-					-	-	-	-	-	SPACE	42	0	
72	SUBTOTAL AMPS Ph A				MAIN BREAKER: 200 AMPS				SUBTOTAL AMPS Ph A 79				SUBTOTAL AMPS Ph B 62				SUBTOTAL AMPS Ph C 57			
73	SUBTOTAL AMPS Ph B				MAIN LUGS: 200 AMPS (MIN)				SUBTOTAL AMPS Ph B				BUS AMPACITY: 200 AMPS (MIN)				SUBTOTAL AMPS Ph C			



1 POWER RISER DIAGRAM  
E7 SCALE: NONE

DRAWING NO.  
E7

**SPECIFICATIONS**  
**Kitchen Renovation and Remodel**  
**For First Presbyterian Church**

**SUPPLEMENTAL CONDITIONS**

EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK  
Before submitting a bid, each bidder shall carefully examine the Drawings, and visit the site of the work. Each bidder shall fully inform himself prior to bidding as to all existing conditions and limitations under which the work is to be performed, and he shall include in his bid a sum to cover all costs of all items necessary to perform the work as set forth in the proposed Contract Documents. No allowance will be made to any bidder because of lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

**DIVISION 1 - GENERAL REQUIREMENTS**

**01001 WORK BY OTHERS**  
New Kitchen Equipment, as indicated on 2/A2, shall be provided by owner and delivered to the job site. Coordination, scheduling, installation, and utility connection shall be by the General Contractor.

**01340 PRODUCTS, SUBSTITUTIONS AND SUBMITTALS**

PART I - GENERAL  
1.1 Throughout the Contract Documents, three or more materials, trade names, manufacturers' or catalog numbers are specified to establish the minimum standard of quality, durability and efficiency, and NOT to limit competition.

1.2 Products not specified may be accepted, if, in the Architect's opinion, they are equal in quality, durability and efficiency to those specified, meet the specified standards, and are of a design in harmony with the work outlined.

1.3 Substitutions which require alterations to the design as outlined by the Plans and Specifications will NOT be approved.

1.4 Individual requirements for submittals are detailed in Specifications.

PART II PRODUCTS

2.1 SUBSTITUTIONS:  
A. Approvals: All products proposed for use require written approval before being incorporated into the work. Do not substitute materials, equipment or methods unless substituted has been specifically approved for this work, in writing, by the Architect.  
B. Data:  
1. Include in request for substitution all shop drawings, catalog descriptive data, specifications, wiring diagrams, manufacturer's current price lists showing the Contractor's new prices, and any additional information requested by the Architect.  
2. Include all adjustments of that trade or any other trade affected by the substitutions.  
3. Telephone requests are to be re-confirmed in writing to the Architect. The Architect and the Owner will not be responsible for any substitutions purchased without the written approval of the Architect.  
4. In no case will an extra be granted for an approved substitution.

PART III EXECUTION

3.1 SUBMITTALS:  
A. Unless otherwise specified, submit 4 copies of submittals in groups containing all associated items to insure that information is available for checking each item when it is received.  
B. Allow at least seven (7) calendar days for review by the Architect following his receipt of all submittals.  
C. Delays caused by tardiness in receipt of submittals will not be an acceptable basis for any extension of the contract completion date.  
D. Review by the Architect is not to be construed as a complete check, but only that the general method of construction and detailing is satisfactory. Review does not relieve the Contractor from complying with all requirements of the contract documents, or any errors which may exist.  
E. Catalog cuts and other written material will be 8 1/2" x 11" with four copies submitted, unless additional copies are required under a specific section.  
F. Submittals must bear the stamp of approval of the General contractor with all field dimensions verified or acknowledgement by the contractor of his responsibility for field dimensions.  
G. Upon receipt of submittals, the Architect will distribute copies to the appropriate parties for review.  
H. The Architect will return to the General Contractor a minimum of one copy bearing notes of the action taken.

END OF SECTION

**01500 TEMPORARY FACILITIES**

1. Owner shall provide and maintain adequate sanitary facilities for the use of construction personnel.
2. The Owner shall provide electricity, heat, and water.
3. The Contractor shall provide transportation and other facilities and services necessary for the proper execution of the Work and protection of the Work in place during construction, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
4. The Contractor shall provide all utility connections and reconnection to complete the Work.
5. The Contractor shall provide one fire extinguisher as necessary to reasonably safeguard against personal injury.
6. The Contractor shall maintain one complete set of plans and specifications on the project at all times.
7. The Contractor shall provide a telephone or mobile phone for use by construction personnel at the job site.
8. The Contractor shall provide for trash and debris collection and removal on a regular basis.
9. Maintain a clean and orderly job site.

END OF SECTION

**01700 PROJECT CLOSE-OUT**

In addition to general broom cleaning performed throughout the progress of the Work, the General Contractor shall be responsible for the following special cleaning for all trades at the completion of the Work:

1. Remove putty stains and paint from all glass.
2. Wash and polish all glass, inside and out, without scratching.
3. Remove stains, marks, fingerprints, soil and dirt from all painted or stained work.
4. Clean and polish all hardware and remove all stains, paint, dirt and dust caused by construction.
5. Replace or refinish all damaged surfaces to the satisfaction of the Owner.

END OF SECTION

**01770 SELECTIVE DEMOLITION**

- A. Disconnect all utility connections to kitchen equipment. Disconnect HVAC system as required for relocation.
- B. Protect surrounding finishes. Protect existing equipment.
- C. A hazardous material mitigation specialty company shall be engaged to mitigate all hazardous materials in the project area. The work will include removal of the ceiling, removal of steel piping insulation; monitoring the air during this process and provide other services to fully comply with laws and regulations including standards and regulations enforced by OSHA and the Environmental Protection Agency.
- D. Obtain agency permits.
- E. Remove items in the path of construction and as indicated on Drawings.
- F. Hazardous materials: Inspection for and removal of hazardous materials.
- G. Air Monitoring as required by regulatory agencies and as required to assure a safe working environment.
- H. Properly dispose of waste off the site.
- I. Fleetwood Daniels Group, LLC, P.O. Box 1144, Waynesville, NC 28786, Tel. 828-400-9499 has provided previous testing services and shall be considered to provide demolition services for this project.

J. Schedule of items to be demolished:  
1. Stud framing, drywall, plaster  
2. Gyp board ceiling and support system in Pantry G02  
3. Suspended ceiling systems  
4. Light fixtures to be replaced

END OF SECTION

**DIVISION 5 - METALS**

**05500 METAL FABRICATION**

PART I - GENERAL

1.1 SECTION INCLUDES - Shop fabricated ferrous metal and prime painted items. Stainless steel appurtenances to kitchen equipment.

1.2 SUBMITTALS - Shop Drawings: Four copies. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.

PART II - PRODUCTS & MATERIALS:

- A. Steel Sections: ASTM A36.
- B. Steel Plate: ASTM A283.
- C. Structural Steel Plate: Type 304, ASTM A240, 16 Gauge with No.4 brushed finish unless noted otherwise, otherwise 304L.
- D. Steel Tubing: ASTM A503, Grade B.
- E. Pipe: ASTM A53, Grade B Schedule 40.
- F. Bolts, Nuts, and Washers: ASTM A325.
- G. Welding Materials: AWS D1.1.

PART II - FABRICATION - GENERAL

- A. Fit and shop assemble in largest practical sections, for delivery to site.
- B. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- C. Exposed Mechanical Fastenings: Flush countersunk screws or bolts, consistent with design of component.
- D. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication.
- E. Accurately form components required for anchorage of fabrications to each other and to building structure.

2.3 FINISHES

- A. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
- B. Shop prime ferrous items with one coat of rust inhibiting primer.

PART III - EXECUTION, EXAMINATION, AND PREPARATION

1.1 EXAMINATION AND PREPARATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. Supply items required to be cast into concrete or embedded in masonry with setting templates, to appropriate sections.

3.2 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Allow for erection loads and provide temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Coordinate installation with adjacent finishes and the work of other trades.
- D. Field weld components as indicated. Perform field welding in accordance with AWS D1.1.
- E. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

END OF SECTION

**DIVISION 6 - WOOD AND PLASTIC**

**06200 FINISH CARPENTRY AND MILLWORK**

PART I - GENERAL - This section includes finish carpentry and trim items and trim repairs to match existing. Hardware and attachment accessories.

PART II - PRODUCTS

2.1 LUMBER MATERIALS

- A. Interior trim, casing, and molding shapes as shown on drawings and are existing and adjacent to new work. Typical painted trim, casing, and molding shall be: Southern yellow pine, grade "B" and better. Kiln-dried, S4S, an approved grade of poplar may be substituted for the above. Oak trim for stained finish to match existing. Grade and type to match.

2.2 ACCESSORIES

- A. Nails: Size and type to suit application, plain finish.
- B. Bolts, nuts, washers, blind fasteners, lags and screws: Size and type to suit application; hot dipped galvanized steel for exterior, high humidity and treated wood locations, plain finish elsewhere.
- C. Contact Adhesives: Solvent release type.
- D. Wall Adhesive: Cartridge type, compatible with wall substrate, capable of achieving durable bond.

PART III - EXECUTION

- 3.1 Prime paint surfaces of items or assemblies in contact with cementitious materials, before installation.
- 3.2 Set and secure materials and components in place, plumb and level.

3.3. Install hardware in accordance with manufacturer's instructions.

- 3.4. Sand work smooth and set exposed fasteners. Apply wood filler in exposed fastener indentations.

END OF SECTION

**DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

**07900 JOINT SEALERS**

PART I - GENERAL

1.1 SECTION INCLUDES

- A. Preparing sealant substrate surfaces.
- B. Placement of joint fillers, backing, and sealant.

1.2 SYSTEM DESCRIPTION - System performance to achieve moisture and air tight joint seals.

1.3 QUALITY ASSURANCE - Perform Work in accordance with sealant manufacturer's requirements for preparation of surfaces and materials installation instructions.

PART II - PRODUCTS

2.1 SEALANTS

- A. Inferior Joints related to Kitchen Equipment, ceramic tile, sanitary surfaces, Tremco Tremil 200, a one part octoxy silicone sealant, white or clear with fungicide. [www.tremcosealants.com](http://www.tremcosealants.com)
- E. Inferior Joints: Dap Acrylic Latex Caulk with Silicone.

2.2 ACCESSORIES

- A. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- B. Joint Backing: ASTM D1056; round, closed cell polyethylene foam rod; oversized 30 to 50 percent larger than joint width.
- C. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART III - EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Verify that surfaces and joint openings are ready to receive work, and that joint measurements and surface conditions are as recommended by the sealant manufacturer.
- B. Remove loose materials and foreign matter which may impair adhesion of sealant.
- C. Verify that joint backing and release tapes are compatible with sealant.
- D. Perform preparation in accordance with ASTM C804 for solvent release, C790 for latex base sealants.

3.2 INSTALLATION

- A. Clean joints in accordance with manufacturer's instructions.
- B. Install sealant in accordance with manufacturer's instructions.
- C. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- D. Tool joints concave, channel shaped as detailed.

END OF SECTION

**DIVISION 9 - FINISHES**  
(See also notes on drawings)

**09260 GYPSUM BOARD SYSTEMS**

PART I - GENERAL

1.1 SECTION INCLUDES:

- A. Metal stud wall framing system.
- B. Gypsum board with taped and sanded joint treatment.

1.2 QUALITY ASSURANCE

- A. Perform gypsum board installation and joint treatment work in accordance with ASIM C840. Install metal framing in accordance to ASTM C 754.
- B. References: American Society for Testing and Materials (ASTM):  
C. Gypsum Specification for Gypsum Wallboard.
2. C 645, Specification for Non-Load (Axial) Bearing Steel Studs, Runners (Track), and Rigid Furring Channels for Screw Application of Gypsum Board.
3. C 754, Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board.
4. C 840, Specification for Application and Finishing of Gypsum Board.
5. C 954, Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases to Steel Studs from 0.33 in. (8.4 mm) to 1.12 in. (2.84 mm) in thickness.
6. C 1002, Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases.
7. C 1047, Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base.

PART II - PRODUCTS

2.1 GYPSUM BOARD SYSTEM

A. Manufacturers:

1. United States Gypsum
- B. Gypsum Board Types: 5/8 inch thick, maximum permissible length, ends square cut, tapered edges, type C or IP-X2, ASTM C36, UL rated.
- C. Screw studs and screw tracks: 25 gauge x 3 5/8". C-shaped, galvanized.

2.2 ACCESSORIES:

- A. Corner Beads: U.S.G. NO.103 Dur-A-Bead
- B. Edge Trim: U.S.G. NO. 200-A
- C. Joint Materials: ASTM C475 reinforcing tape, joint compound, adhesive, and water.
- D. Fasteners: ASTM C1002 Type S12 hardened screws, Screw studs and screw tracks, 25 gauge x 3 5/8". C-shaped, galvanized, Z furring channel, 25 gauge, galvanized.
- E. Adhesive: ASTM C557

PART III - EXECUTION

3.1 INSTALLATION - GYPSUM BOARD

- A. Install gypsum board and joint treatment in accordance to ASTM C 840.
- B. Fasten gypsum board to furring or framing with screws.
- C. Place corner beads at external corners. Use longest practical length.
- D. Place edge trim where gypsum board abuts dissimilar materials and as shown.

- 3.2 Fire rate assemblies: provide and install components in strict accordance to noted Underwriter's Laboratory tested assembly. See Drawings.

3.3 JOINT TREATMENT

- A. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
- B. Feather coats onto adjoining surfaces so that camber is maximum 1/16 inch.

3.4 TOLERANCES - Maximum variation from true flatness: 1/4" in 10 feet in any direction.

END OF SECTION

**09300 CERAMIC TILE**

PART I - GENERAL

1.1 SECTION INCLUDES:

- A. Ceramic quarry tile floor and quarry tile sanitary wall base to match existing floor and base.
- B. Glazed ceramic wall tile to match existing.
- C. Glass mesh mortar wall backer units.

1.2 QUALITY ASSURANCE - Perform Work in accordance with TCA Handbook for Ceramic Tile Installation.

PART 2 - PRODUCTS



ARCHITECT

**GEORGE STOWE • ARCHITECT**  
member, American Institute of Architects  
184 East Chestnut Street • Asheville, NC 28801  
ph 828-251-2357 • fax 828-225-0530  
[gstowearchitect@bellsouth.net](mailto:gstowearchitect@bellsouth.net)  
[www.GeorgeStoweArchitect.com](http://www.GeorgeStoweArchitect.com)

A circular postmark from Asheville, North Carolina, dated March 30, 2014. The text "GEORGE W. STONE" is at the top, "REG'D U.S. POSTAGE" is on the left, "PAID" is on the right, and "4501" is in the center. The bottom arc contains "NORTH CAROLINA" and "ASHEVILLE, N.C.".

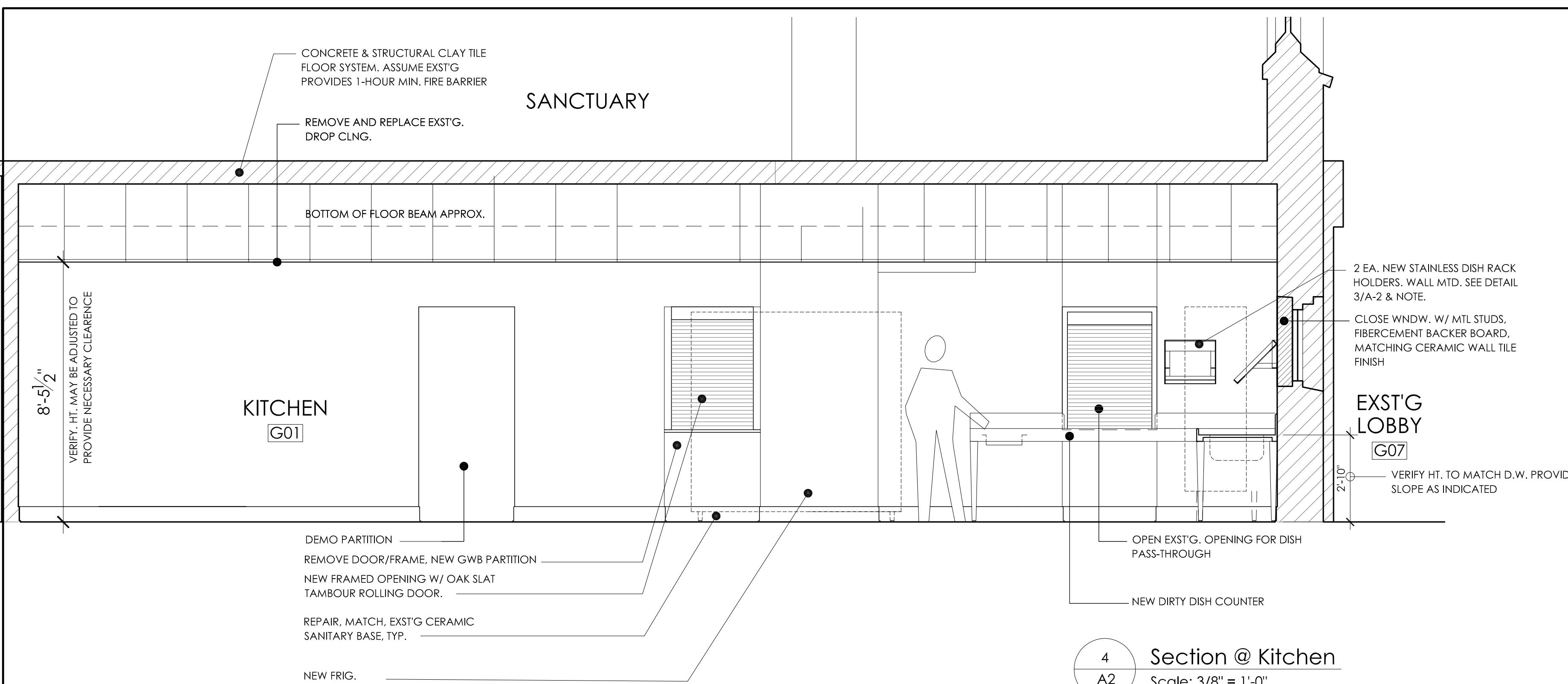
DATE:  
1-14-2014  
VISIONS:  
REVISED 1-16-2014  
REVISED 1-30-2014

# FIRST PRESBYTERIAN CHURCH

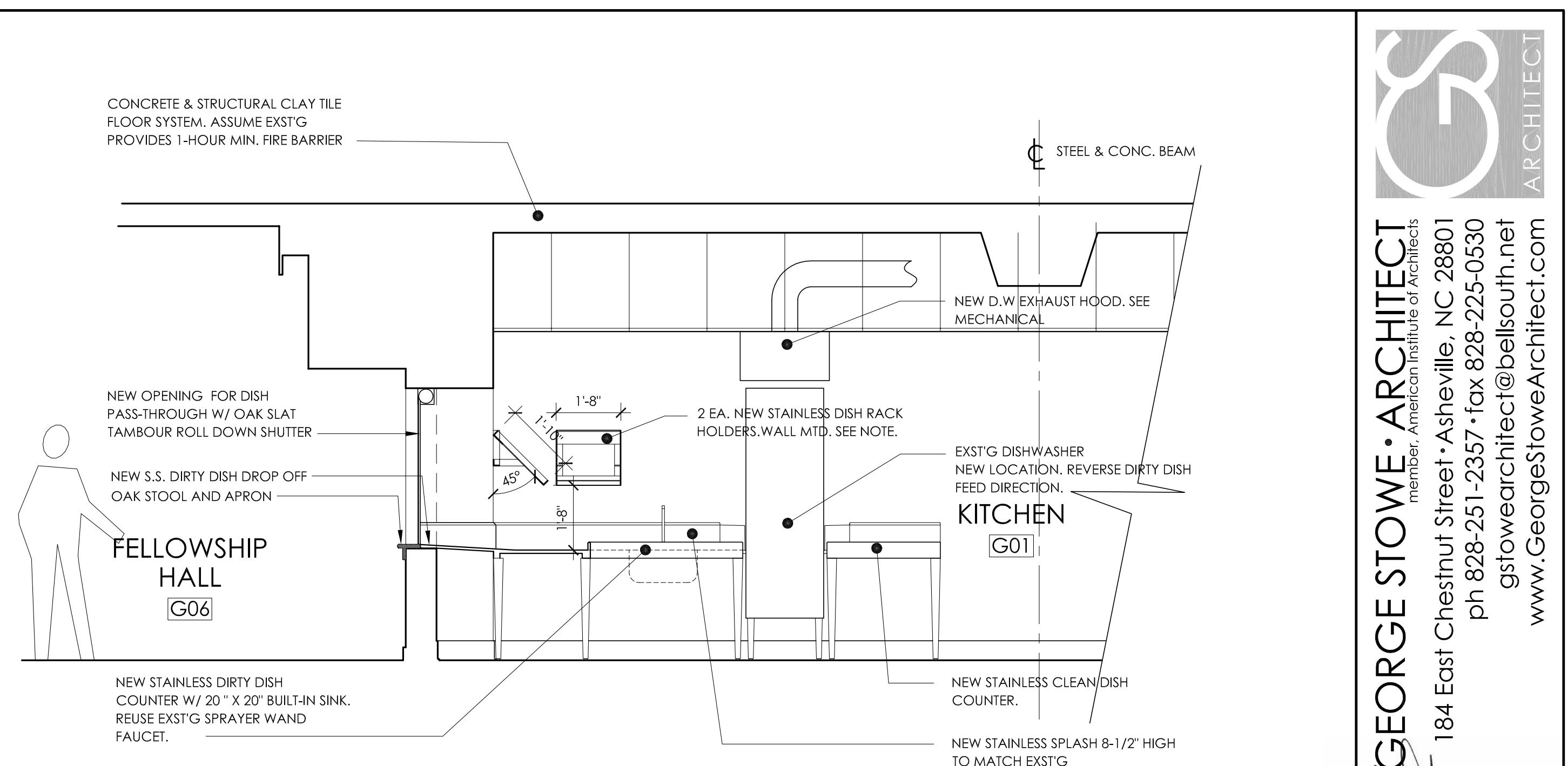
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Kitchen Remodel for:  
First Presbyterian Church  
10 Church St.  
Asheville, NC

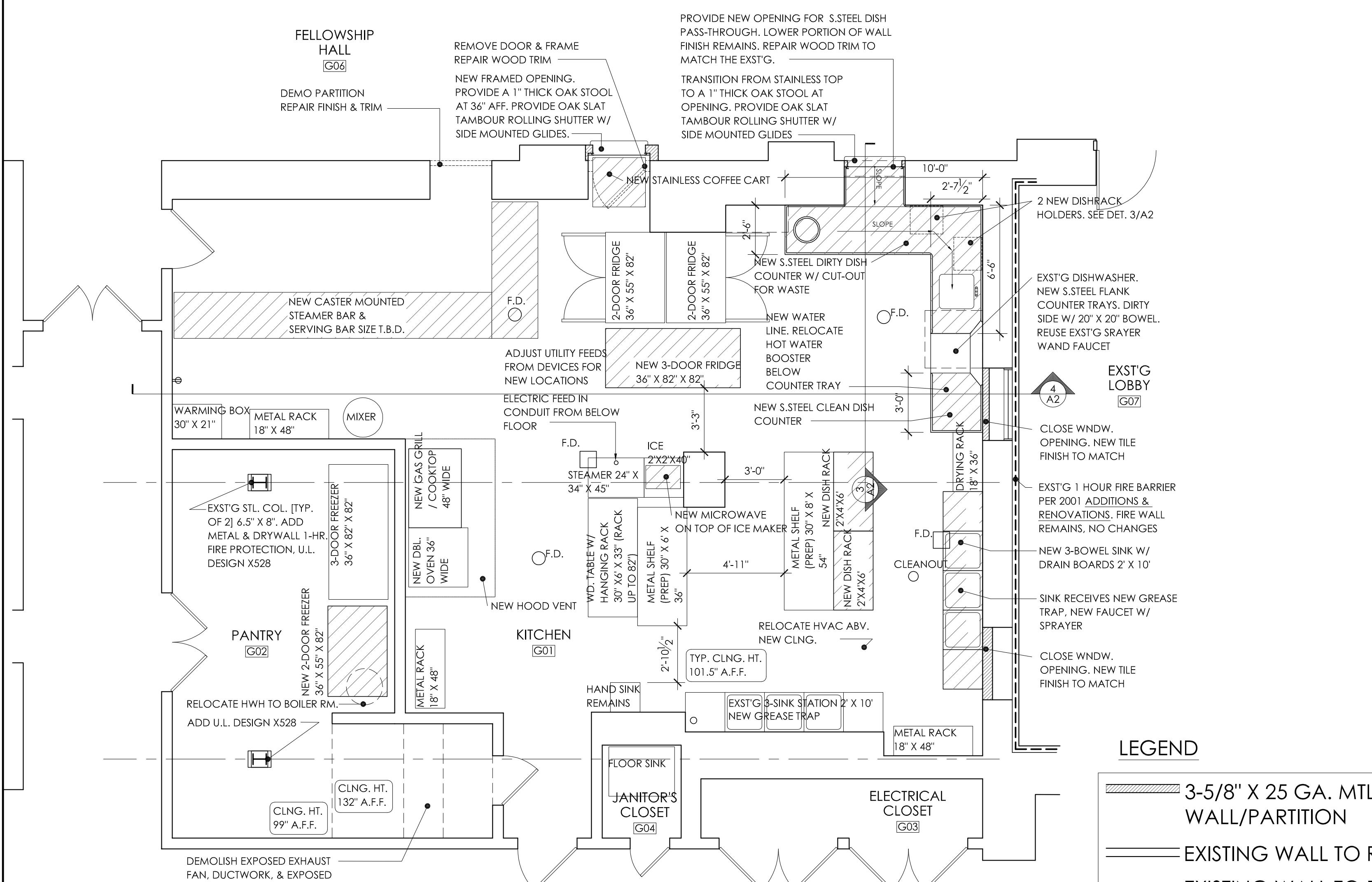
A2



# Section @ Kitchen



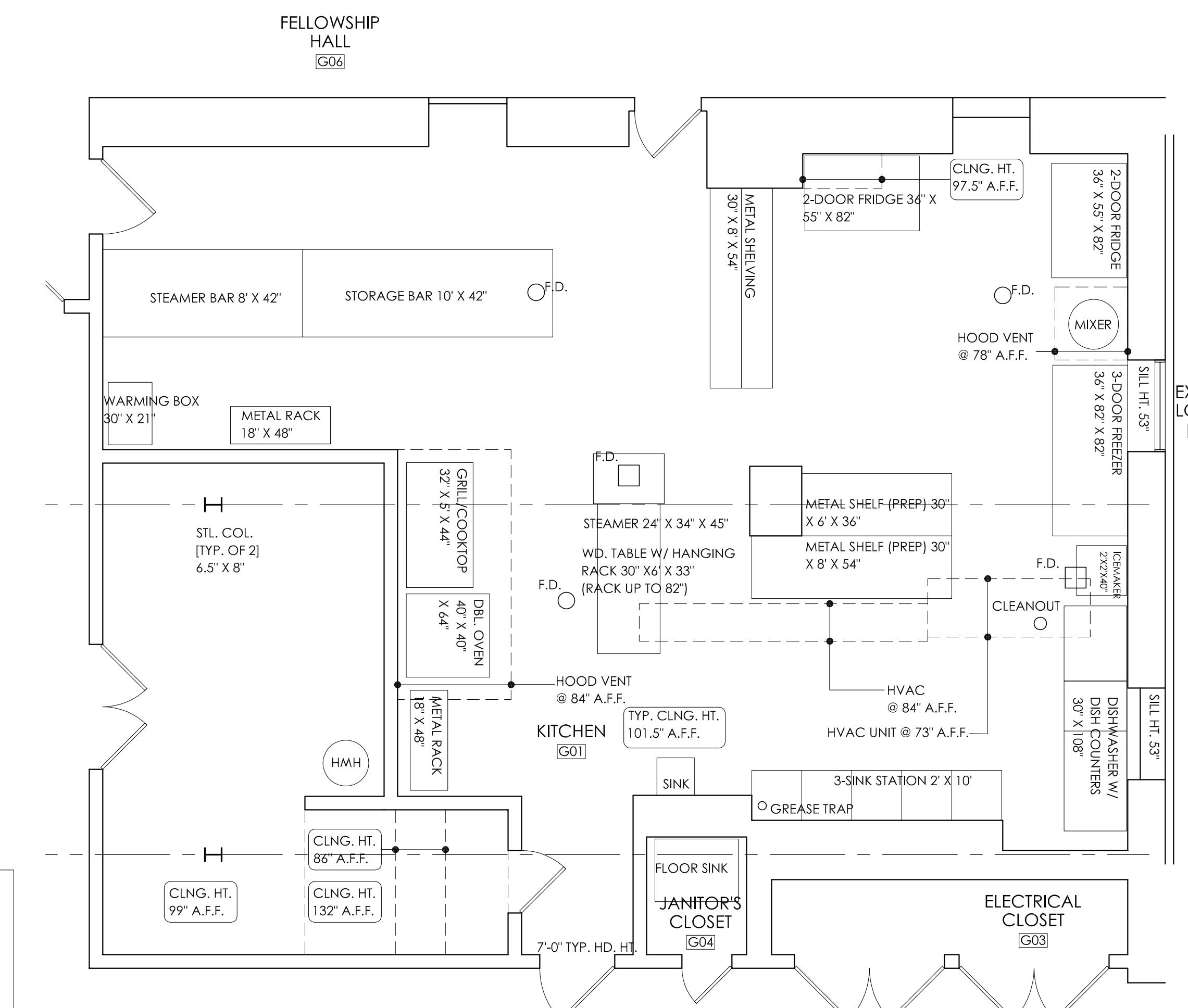
3  
A2      Section @ Kitchen  
Scale: 3/8" = 1'-0"



2  
A2

# Remodel Kitchen Floor Plan

Scale: 1/4" = 1'-0"



# Existing Kitchen Floor Plan

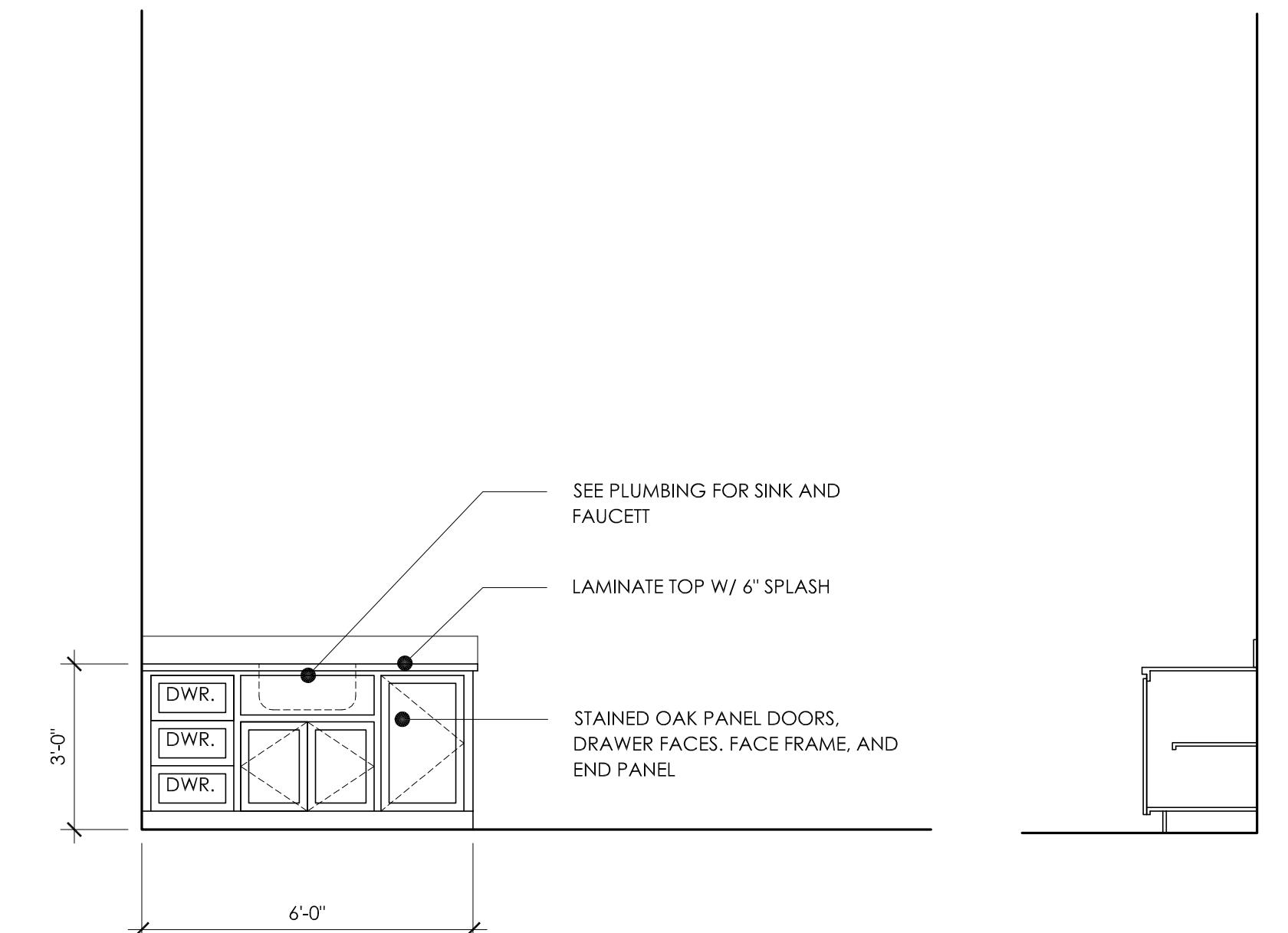
<u>LEGEND</u>	
	3-5/8" X 25 GA. MTL FRAMED WALL/PARTITION
	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
	KITCHEN APPLIANCE N.I.C.
	REFERENCE TO SECTION AND/ OR DETA ON 'A' SHEET NOTED

# FIRST PRESBYTERIAN CHURCH

Asheville, NC

Kitchen Remodel for:

A3

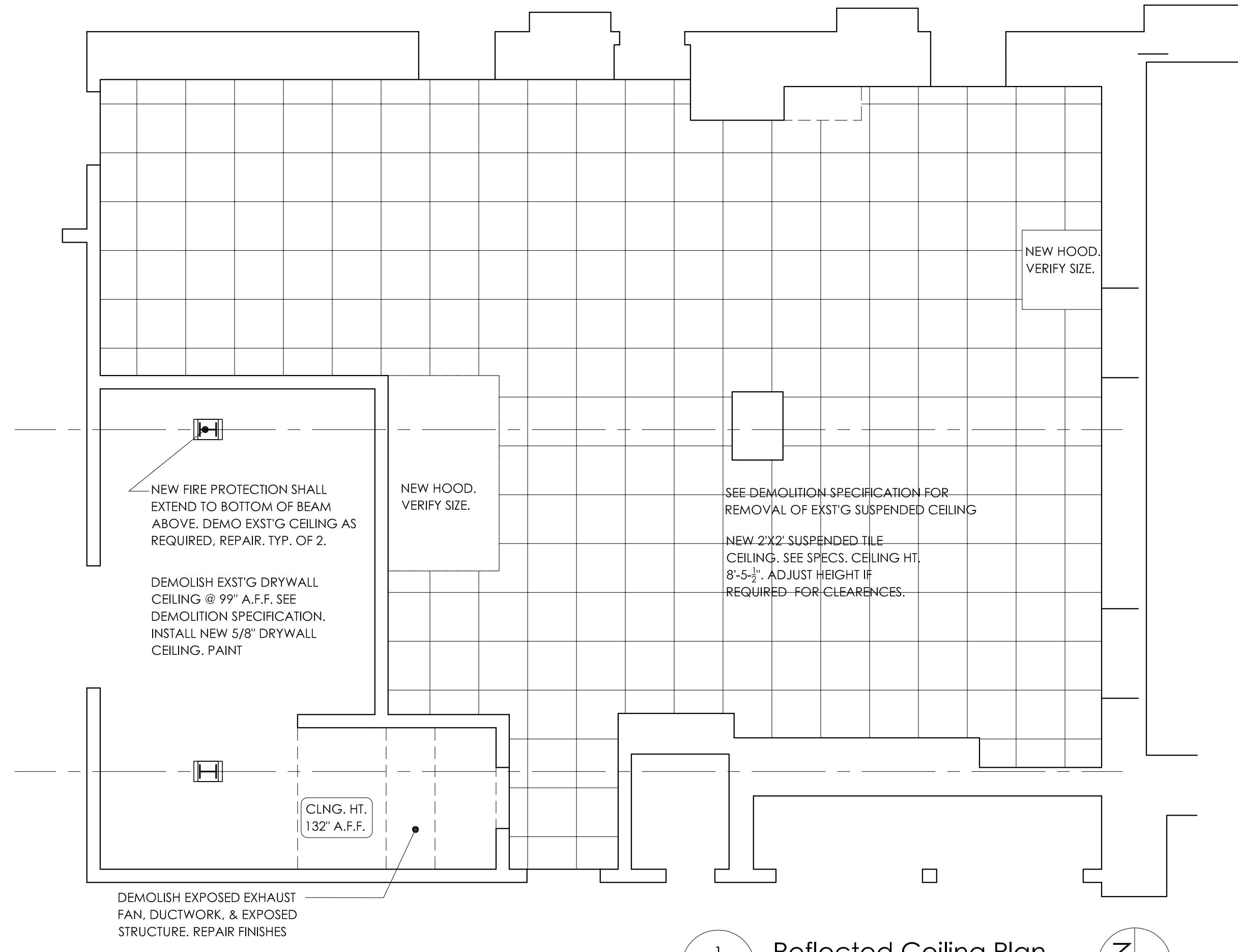


NOTE: CASEWORK AND PLUMBING REQUIRED FOR  
THE NEW SINK IS IN 'FLOWERS' ROOM ON FIRST  
FLOOR. SEE PLAN 2/A-1. SEE PLUMBING.

2 A3 Elevation Flower Sink  
Scale: 3/8" = 1'-0"

3 A3 Section Flower Sink Cabinet  
Scale: 3/8" = 1'-0"

DATE:  
01-14-2014  
REVISIONS:  
REVISED 1-30-2014



1 A3 Reflected Ceiling Plan  
Scale: 1/4" = 1'-0"

## FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	WALLS	TRIM	CLNG.	CLNG. HT.	BASE	NOTE
		✓ REPAIR CERAMIC QUARRY TILE PROTECT EXSTG V.C. TILE EXSTG REMAINS PROTECT EXSTG CARPET	✓ REPAIR & PAINT GYP. BD. OR PLASTER NEW GLAZED WALL TILE TO MATCH. SEE DWG.	✓ ✓ PAINTED METAL TRIM PAINTED WOOD TRIM REPAIR / MATCH STAINED WOOD TRIM	✓ REPLACE, NEW PTD. GYP. BD. ACOUSTIC CLNG. TILE	✓ 8'-5 1/2" 8'-3" PAINT EXPOSED STRUCTURE	✓ PROTECT 4" VINYL REPAIR / MATCH 4" OAK	
G01	KITCHEN		✓	✓				
G02	PANTRY	✓	✓	✓				
G03	ELECTRICAL CLST	NO NEW FINISH WORK	✓	✓				
G04	JANITOR'S CLST	✓	✓	✓				
G05	CORRIDOR	✓ ✓	✓	✓				
G06	FELLOWSHIP HALL	✓ ✓	✓	✓				1.

NOTES:

- MATCH EXISTING WALL SURFACES IN FELLOWSHIP HALL AT REPAIR AREAS ONLY. PROTECT EXISTING FINISHES.

(SUBMIT PRODUCT INFORMATION FOR REVIEW)



**Tilden White**  
& Associates, PLLC  
35 Merrimon Ave.  
Asheville, NC 28801  
(828) 253-4527 (bh)  
www.tildenwhite.com  
1371

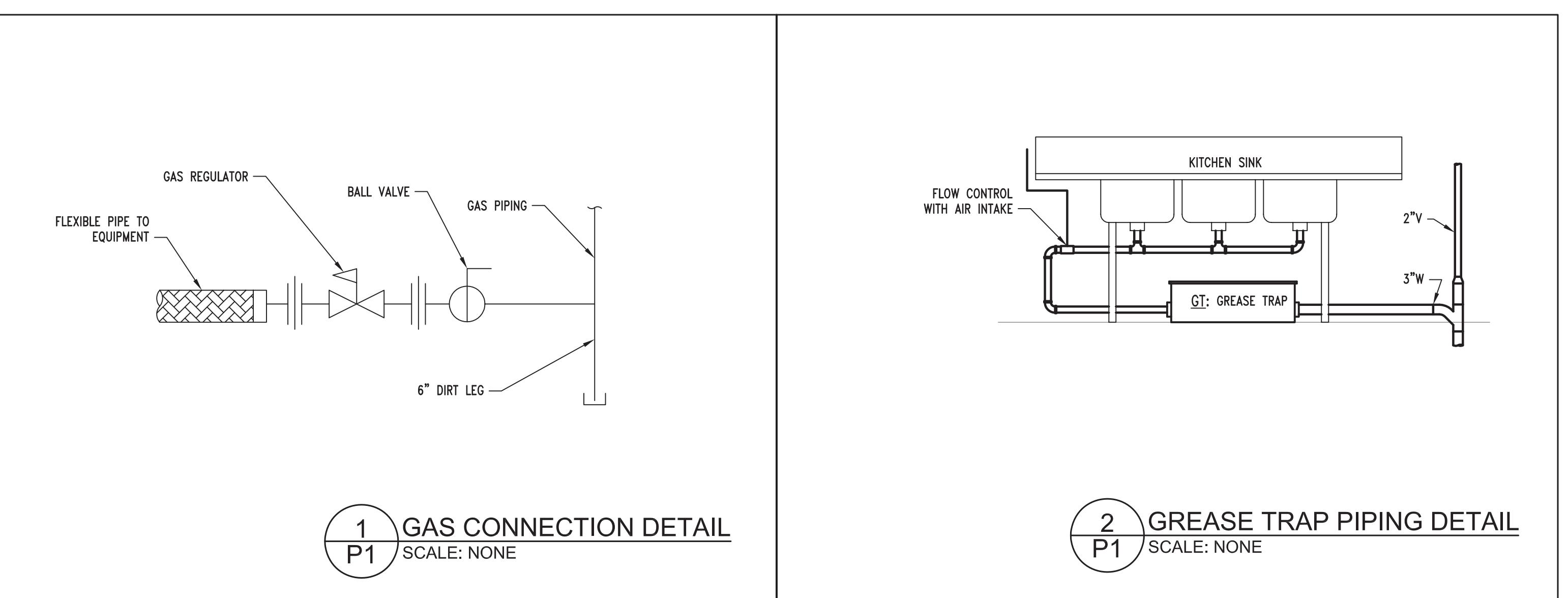
PLUMBING LEGEND	
Cold Water Piping Below Grade	
Cold Water (CW)	
Tempered Hot Water (THW)	
Tempered Hot Water Return (TWR)	
140°F Water (HW)	
140°F Water Return (HWR)	
Natural Gas Piping	
Sanitary Waste Piping	
Vent Piping	
Point of Connection (NEW)	
Floor Drain (FD)	
Floor Sink (FS)	
Floor Cleanout (FCO)	
Ball Valve	
Check Valve	
Air Admittance Valve (AAV)	
Mixing Valve	

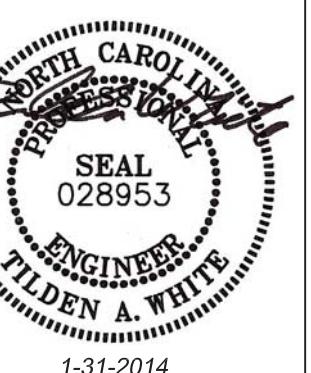
PLUMBING NOTES	
1. All work and materials shall comply with the current North Carolina State Building Code and local codes and ordinances.	
2. Water piping above grade shall be type L hard copper. Water piping below grade shall be type K soft copper with no joints under slab. Joints shall be made with lead free solder up to 1" pipe size. Joints shall be made with silver brazing solder for pipe sizes 1-1/4" and larger.	
3. Above grade cold water and individual hot water runout piping shall be insulated with 1/2" thickness preformed fiberglass pipe insulation with all service jacket. Hot water mains and recirculation piping shall be insulated with 1" thick preformed fiberglass pipe insulation with all service jacket. All above grade piping in unheated areas shall be insulated with 2" thick preformed fiberglass pipe insulation with all service jacket. Provide foamglass insulation inserts and galvanized steel pipe shields at pipe supports. All above grade piping shall be routed within the thermal envelope.	
4. Sanitary and vent piping shall be service weight cast iron with hub and spigot joints with neoprene compression joints below grade; no-hub fittings may be used for above grade piping. Subject to local authority approval and provided that the ceiling is not used as a return air plenum, schedule 40 ASTM D-2665 PVC piping with PVC-DWV pattern solvent welded fittings may be substituted for cast iron piping.	
5. Grease piping shall be service weight cast iron with hub and spigot joints with neoprene compression joints below grade; no-hub fittings may be used for above grade piping. Grease piping shall be sloped minimum 1/8" per foot.	
6. Provide firestopping at all rated penetrations. Coordinate with GC.	
7. Gas piping shall be schedule 40 black steel with threaded and coupled joints. Paint gas piping with two coats of safety yellow oil based enamel paint.	
8. Provide connections to all kitchen equipment. Equipment will be supplied and set in place by the food service contractor. Faucets, drain outlets, etc. will be supplied and installed by the food service contractor. Provide the cold water, hot water, drain and gas piping to the equipment as detailed in the food service equipment supplier's detailed shop drawings. Coordinate the location of floor drains, floor sinks, plumbing fixtures, and equipment rough-ins with the detailed shop drawings.	
9. Warranty all work for a minimum of 1 year from date of acceptance by owner.	

PLUMBING FIXTURE SCHEDULE										
TAG	Fixture	Fixture manufacturer (or equal)	Fixture model #	Trim manufacturer (or equal)	Trim model #	Sanitary	Vent	Cold water	Hot water	Remarks
P1	Sink, Single compartment, HC accessible.	Elkay	DLRS332212	Delta	27C1944	2"	2"	1/2"	1/2"	33"x22" overall dimension. Inside bowl: 28"x16"x11-5/8". Heavy duty gooseneck spout with hose and spray. Provide four holes in deck for spout, sprayer, hw, cw.
GT1	POINT OF USE GREASE TRAP	Ashland	PolyTrap 4820	-	-	3"	2"	-	-	40 LB CAPACITY WITH FLOW RESTRICTOR.
GT2	POINT OF USE GREASE TRAP	Ashland	PolyTrap 4820	-	-	3"	2"	-	-	40 LB CAPACITY WITH FLOW RESTRICTOR.

GAS-FIRED WATER HEATER SCHEDULE		
tag	GWH	
basis of design	State	
model	SUF-100-199-NEA	
type	tank type	
storage capacity (gallons)	100 gal	
heating input (mbh)	199 mbh	
recovery (gph at 100° rise)	230 gph	
energy factor	96%	
volt/phases	115/1	
normal load (watts)	100 W	
notes	1,2,3	

1. Provide service access in accordance with Code and manufacturer's recommendations.  
2. Provide expansion tank.





Kitchen Remodel for:  
**FIRST PRESBYTERIAN CHURCH**

EIRS

P2

351 Merrimon Ave.  
Asheville, NC 28801  
(828) 255-4327 (ph)  
[www.tildenwhite.com](http://www.tildenwhite.com)



1371

The logo for George Stowe Architect consists of a large, bold, white 'GS' monogram at the top. Below the monogram, the word 'ARCHITECT' is written vertically in a tall, thin, serif font. To the left of the monogram, the word 'GEORGE' is written vertically in a tall, thin, serif font. To the right of the monogram, the word 'STOWE' is written vertically in a tall, thin, serif font. Between 'ARCHITECT' and 'STOWE', the words 'member, American Institute of Architects' are written in a smaller, sans-serif font.

The logo for George Stowe Architect consists of a large, bold, stylized monogram 'GS' at the top. Below the monogram, the word 'ARCHITECT' is written vertically in a smaller, all-caps serif font. To the left of the monogram, the name 'GEORGE STOWE' is stacked vertically in a bold, sans-serif font. A thin vertical line connects the 'G' in 'GEORGE' to the 'S' in 'STOWE'. At the bottom, the company's address, phone number, fax number, email, and website are listed in a clean, sans-serif font.

**1** PLUMBING PLAN  
P2 SCALE: 1/4" = 1'

NOTE ALL EXISTING FLOOR DRAINS (FD), FLOOR SINKS (FS) AND FLOOR CLEANOUTS (FCO). PROVIDE A NEW CLEANING SERVICE OF EXISTING SANITARY LINES ALONG WITH A VIDEO INSPECTION SERVICE OF UNDERSLAB SANITARY PIPING IN THE KITCHEN AREA. EXISTING DRAINS AND SANITARY PIPING ARE TO BE RE-USED - NO ADDITIONAL SANITARY PIPING OR FLOOR CUTTING.

CW DROP  
FOR COFFEE  
MAKER

FEED ICE MAKER  
EXISTING STEAMER  
WATER CONNECTION

FD  
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ON PUM  
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FY  
AND  
E GAS

PROVIDE NEW DEEP SINGLE COMPARTMENT STAINLESS STEEL SINK IN THE FLOWER ROOM ON THE SANCTUARY FLOOR LEVEL. VENT WITH A 2" AIR ADMITTANCE VALVE. CONNECT TO EXISTING 2" SANITARY BELOW. CONNECT TO EXISTING CW BELOW. FIRE-STOP ALL FLOOR PENETRATIONS. SEE ARCHITECTURAL PLANS FOR LOCATION.

REMOVE EXISTING ELECTRIC WA  
HEATER AND TURN OVER TO  
OWNER TO USE IN ANOTHER  
LOCATION AT A FUTURE DATE.  
THE CAPACITY IS NOT ENOUGH  
SERVE THE KITCHEN PER HEA  
DEPARTMENT REGULATIONS.

PROVIDE NEW GAS PIPING  
BACK TO EXISTING GAS  
MAIN. CONFIRM EXISTING  
GAS PRESSURE AND  
PIPING SIZE

PROVIDE NEW HOT WATER  
PIPING AND HOT WATER  
RECIRCULATION PIPING OVER  
NEW GAS WATER HEATER  
LOCATED IN BOILER ROOM.  
PROVIDE RECIRCULATION PUMP  
ROUTE FLUE PIPING TO  
CHIMNEY. FIELD VERIFY  
EXISTING CONDITIONS AND  
DIMENSIONS. PROVIDE GAS  
PIPING.

This architectural floor plan illustrates the layout of a kitchen area, showing the locations of various fixtures and the details of the piping systems.

**Key Features and Labels:**

- CW DROP FOR COFFEE MAKER:** A callout points to a connection point for a coffee maker.
- FEED ICE MAKER FROM EXISTING STEAMER WATER CONNECTION:** A callout points to a connection point for an ice maker.
- SOLENOID VALVE, INTERLOCK WITH HOOD FIRE PREVENTION SYSTEM:** A callout points to a solenoid valve connected to a gas line.
- GAS:** Labels indicate gas connections.
- 222MBH:** A label indicates a fixture load of 222 MBH.
- 75MBH:** A label indicates a fixture load of 75 MBH.
- FD:** Labels indicate floor drains.
- FS:** Labels indicate floor sinks.
- CO:** Labels indicate floor cleanouts.
- ICE:** Labels indicate ice storage.
- HAND SINK REMAINS:** Labels indicate the location of old sink fixtures.
- GT1, GT2:** Labels indicate fixtures labeled GT1 and GT2.
- Piping Dimensions:** Various pipe sizes are indicated: 1/2" CW, 3/4" CW, 1/2" HWR, 3/4" HW, and 1/2" HWR.
- Notes:**
  - Provide new deep single compartment stainless steel sink in the flower room on the sanctuary floor level. Vent with a 2" air admittance valve. Connect to existing 2" sanitary below. Connect to existing CW below. Fire-stop all floor penetrations. See architectural plans for location.
  - Note all existing floor drains (FD), floor sinks (FS) and floor cleanouts (FCO). Provide a new cleaning service of existing sanitary lines along with a video inspection service of underslab sanitary piping in the kitchen area. Existing drains and sanitary piping are to be re-used - no additional sanitary piping or floor cutting.
  - Remove existing electric water heater and turn over to owner to use in another location at a future date.
  - Provide new gas piping back to existing gas main. Confirm existing



# FIRST PRESBYTERIAN CHURCH

40 Church St.  
Asheville, NC

P3



Kitchen Remodel for:  
January 30, 2014  
REVISIONS:

**System No. W-L-5021**  
DF07  
F Rating - 1 Hr  
T Rating - 1/2 Hr  
L Rating At Ambient - 4 CFM/Sq Ft  
L Rating At 400 F - Less Than 1 CFM/Sq Ft

**SECTION A-A**

1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in, lumber spaced 16 in. OC. Steel studs to be min 3-1/2 in, wide and spaced max 24 in. OC. B. Gypsum Board\* — One layer of 5/8 in. thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max diam of opening is 8 in.

2. Metallic Sleeve — Nom 8 in. diam (or smaller) Schedule 40 (or thinner) steel pipe cast into wall assembly with joint compound and installed flush with wall surfaces.

3. Through-Penetrant — One metallic pipe or tubing to be centered within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or tubing may be used: A. Steel Pipe — Nom 4 in. diam (or smaller) Schedule 40 (or heavier) steel pipe.

B. Copper Tubing — Non 4 in. diam (or smaller) Type L (or heavier) copper tubing.

C. Copper Pipe — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

4. Pipe Covering\* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 1600-2400 kg/m<sup>3</sup>) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. An annular space of 3/4 in. is required within the firestop system. See Pipe and Equipment Covering — Materials — (BRGU) Category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

5. Packing Material — Min 2-3/4 in. thickness of min 40 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

6. Fill, Void or Cavity Material\* — Sealant — Min 1 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Sealant \*Bearing the UL Classification Mark

**INSULATED PIPE FIRE STOPPING DETAIL FOR STUD WALL PENETRATION (1 HR RATED)**  
1 P3  
SCALE: NONE

**System No. W-J-5134**  
DF13  
F Rating - 2 Hr  
T Rating - 1 Hr  
L Rating At Ambient - 4 CFM/Sq Ft (See Item 4)  
L Rating At 400 F - Less Than 1 CFM/Sq Ft (See Item 4)

**SECTION A-A**

1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 8 in. (203 mm).

2. Through Penetrant — One metallic pipe or tube to be installed eccentrically or concentrically within the firestop system. Pipe or tube to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipes and tubes may be used:

A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.

B. Iron Pipe — Non 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.

C. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

D. Copper Tube — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tube.

3. Pipe Covering\* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 1600-2400 kg/m<sup>3</sup>) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated pipe and the periphery of the opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm).

See Pipe Equipment Covering — Materials — (BRGU) Category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

4. Fill, Void or Cavity Material\* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall assembly. At point contact location, min 1/2 in. (13 mm) diam bead of fill material applied at insulated metallic pipe/wall interface on both surfaces of wall. L Ratings apply only when FS-ONE Sealant is used.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Sealant, CP 606 Sealant or CP 601S Sealant

\*Bearing the UL Classification Mark

**INSULATED PIPE FIRE STOPPING DETAIL FOR CONCRETE WALL PENETRATIONS (2 HR RATED)**  
2 P3  
SCALE: NONE

**System No. W-L-1054**  
DF08  
F Ratings - 1 and 2 Hr (See Items 1 and 3)  
T Rating - 0 Hr  
L Rating At Ambient - Less Than 1 CFM/Sq Ft  
L Rating At 400 F - 4 CFM/Sq Ft

**SECTION A-A**

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in, lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in, wide and spaced max 24 in. OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 6 to 8 in, wider and 4 to 6 in, higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in, clearance is present between the penetrating item and the framing on all four sides.

B. Gypsum Board\* — Nom 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 32-1/4 in. for steel stud walls. Max diam of opening is 14-1/2 in. for wood stud walls.

The F Rating of the firestop system is equal to the fire rating of the wall assembly.

2. Through-Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 2-1/4 in. Pipe may be installed with continuous point contact. Pipe, conduit or tubing may be installed at an angle not greater than 45 degrees from perpendicular. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used: A. Steel Pipe — Nom 30 in diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe — Nom 30 in. diam (or smaller) cast or ductile iron pipe.

C. Conduit — Nom 4 in. diam (or smaller) steel electrical metallic tubing or 6 in. diam steel conduit.

D. Copper Tubing — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.

E. Copper Pipe — Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.

3. Fill, Void or Cavity Material\* — Sealant — Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or continuous contact locations between pipe end and wall, a min 1/2 in. diam bead of fill material shall be applied at the pipe wall interface on both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Sealant

\*Bearing the UL Classification Mark

**METALLIC PIPE FIRE STOPPING DETAIL FOR STUD WALL PENETRATIONS (1&2 HR RATED)**  
3 P3  
SCALE: NONE

**System No. C-AJ-1421**  
DF10  
F Rating - 2 and 3 Hr (See Item 4B)  
T Rating = 0 Hr

**SECTION A-A**

1. Floor or Wall Assembly - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 6 in. (152 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Metallic Sleeve - (Optional) Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces.

3. Through-Penetrant - One metallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, tube or conduit and periphery of opening shall be min 0 in. (0 mm) (point contact) to max 5-3/8 in. (137 mm). Pipe or conduit to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe - Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe - Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.

C. Copper Pipe - Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

D. Copper Tubing - Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.

E. Conduit - Nom 4 in. (102 mm) diam (or smaller) steel conduit.

F. Conduit - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT).

4. Firestop System - The firestop system shall consist of the following:

A. Packing Material - Min 40 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material\* - Sealant - Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. For 3 Hr rated assemblies, a min 1/4 in. (6 mm) diam bead of fill material shall be applied at the concrete/pipe interface at the point contact location on the top surface of floor and on both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - FS-ONE Sealant or CP604 Self-Leveling Firestop Sealant. CP604 shall be used in floor applications only. When CP604 is used, F Rating is 2 Hr.

\*Bearing the UL Classification Mark

**METALLIC PIPE FIRE STOPPING DETAIL FOR CONCRETE WALLS & FLOORS (2&3 HR RATED)**  
4 P3  
SCALE: NONE



**FIRST PRESBYTERIAN CHURCH**  
Kitchen Remodel for:  
Asheville, NC

40 Church St.

M1

MECHANICAL LEGEND	
Supply Diffuser (Type X, YYY CFM)	
Return Grille (Type X)	
Rectangular Duct X" Wide, Y" Deep (Inside Clear Dimension)	
Round duct X" Diameter (Inside Clear Dimension)	
Duct Transition: Rectangular To Rectangular	
Duct Branch Tap: Round Spin-In Damper	
Thermostat - Mount 48° AFF	
Fire Damper - FD	

AIR DEVICE SCHEDULE				
TAG	S1	S2	R1	T1
manufacturer (or equal)	Price	Price	Price	Price
model	SPD-24x24	SPD-24x24	530	530
type	Cig Supply	Cig Supply	Cig Return Grille	Sidewall Transfer Grille
neck	10"Ø	12"Ø	22"x22"	24" x 12"
airflow (cfm)	250-400	40"-500	0-1000	900-1800
NC	<20	<20	<25	<25
applicable notes	1.2	1.2	1	1
1. Provide with white baked enamel finish unless noted otherwise. See reflected ceiling plans for locations.				
2. Provide ceiling diffusers with equalizing grid. See plan for directional arrows. Provide directional diffusers as indicated so that air doesn't blow directly toward the grease hood.				

FAN SCHEDULE	
TAG	VF1
serves	PANTRY
manufacturer (or equal)	Greenheck
model	CSP-A510
type	INLINE
drive	direct
rpm	1070
airflow (cfm)	506
esp (inches H2O)	0.125
max. sones	2.8
control	BREAKER
voltage	120V
power (watts)	217 W
weight	40 lbs
applicable notes	1.2
1. Provide unit mounted disconnect and backdraft damper.	
2. Run continuously - control from panel K2.	

MECHANICAL NOTES	
1. All work and materials shall be in accordance with the applicable sections of the N.C. State Building Code and local codes and ordinances.	
2. Provide five sets of mechanical equipment submittals to the GC for the architect, engineer, GC and owner to review and approve.	
3. Obtain and pay for all permits, fees, inspections etc. as required for work under this contract.	
4. It is the responsibility of the mechanical contractor to field verify existing conditions and dimensions before beginning work.	
5. Perform all work in a neat workman-like manner and in accordance with industry standards.	
6. Ductwork shall be galvanized steel fabricated and installed in accordance with SMACNA hvac duct standards. Seal all joints with mastic duct sealant.	
7. Rectangular ductwork within 10' of fans shall be internally lined with 1-1/2" thick, 1.5 PCF acoustical duct liner.	
8. Note that the dimensions on the plans are net free internal dimensions. Increase the dimensions during fabrication to allow for the thickness of duct liner.	
9. Supply ductwork within the thermal envelope shall be insulated with equivalent R-6 insulation with vapor barrier jacket. Supply ductwork outside of the thermal envelope shall be insulated with equivalent R-8 insulation with vapor barrier jacket. This note also applies to make-up air ductwork.	
10. Return ductwork within the thermal envelope is not required to be insulated. Return ductwork outside of the thermal envelope shall be insulated with equivalent R-8 insulation with vapor barrier jacket.	
11. Exhaust ductwork within the thermal envelope is not required to be insulated except within 10' of its exterior termination where it shall be insulated with equivalent R-8 insulation with vapor barrier jacket. Exhaust ductwork outside of the thermal envelope shall be insulated with equivalent R-8 insulation with vapor barrier jacket. This note does not apply to grease ductwork.	
12. Outside air ducts shall be insulated with equivalent R-8 insulation with vapor barrier jacket.	
13. Grease ductwork shall be constructed of 18 gauge (or thicker) stainless steel. Installation methods must be in accordance with Section 506 of the NC Mechanical Code.	
14. Rectangular ductwork exposed to the weather shall be internally lined with 1" thick, 3 PCF acoustical duct liner, then externally insulated with 1" thick rigid fiberglass duct board insulation, then covered with aluminum jacket. Fabricate the aluminum jacket sections with continuous top and sides. Install so that the bottom seam runs longitudinally with the duct. Secure the seams with self-tapping TEK screws. Seams on the aluminum jacket shall be caulked with aluminum colored silicone caulk.	
15. All exposed (visible) ductwork shall have a paint grip finish. Exposed round ductwork shall be double wall spiral duct.	
16. Flexible ductwork shall be UL listed, helical wire reinforced film with vapor barrier jacket and a maximum c-factor of 0.23. Flexible ductwork shall be limited to 10' maximum length.	
17. Mitered elbows in ductwork shall be provided with double thickness turning vanes. Elbows shall be raduisued 90° wherever possible. Mitered elbows are to be used only where space restrictions prevent the use of raduisued elbows.	
18. Balance airflows to +/- 10% of the values specified on the plan. Submit a balance report, signed by the project manager, certifying that the balance was performed and the results are true and accurate.	
19. Condensate piping located within walls or above the ceiling shall be insulated with ½" Armflex insulation.	
20. Gas piping shall be schedule 40 black steel with wrought iron fittings. Paint gas piping exposed to the exterior with two (2) coats of yellow oil based enamel paint unless otherwise noted.	
21. Fire dampers shall be 1-1/2 hr UL listed - dynamic rated. Install dampers per printed instructions. Provide access panels as required for servicing.	
22. Seal all duct openings during construction to prevent dust and debris from accumulating inside the ductwork.	
23. Change air filters at project close-out to insure that clean filters are in place when the owner takes possession of the systems.	
24. Provide record drawings to the building owner within 90 days after the date of system acceptance. Record drawings shall include as a minimum the location and performance data of each piece of equipment, general configuration of duct and pipe distribution systems including sizes, and the terminal air or water design flow rates.	
25. Provide an operating manual and a maintenance manual to the building owner within 90 days after the date of system acceptance.	
26. Warranty all work and materials for a minimum of one year from the date of acceptance by the owner. Refrigeration compressors shall carry an additional 4 years parts only warranty.	

2012 APPENDIX B BUILDING CODE SUMMARY:	
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT	
Method of Compliance	
<input checked="" type="checkbox"/> Prescriptive	<input type="checkbox"/> Energy Cost Budget
Thermal Zone	4
Winter Dry Bulb:	68°F
Summer Dry Bulb:	85°F
Interior Design Conditions	
Winter Dry Bulb:	68°F
Summer Dry Bulb:	75°F
Relative Humidity:	50%
Building Heating Load:	30 mbh
Building Cooling Load:	60 mbh
Mechanical Spacing Conditioning System	
description of unit:	EXISTING 5TON HP
heating efficiency:	See Schedules
cooling efficiency:	See Schedules
heat output of unit:	See Schedules
cooling output of unit:	See Schedules
Boiler	
total boiler output. If oversized, state reason.	n/a
Chiller	
total chiller capacity. If oversized, state reason.	n/a
List equipment efficiencies:	See Schedules
Equipment schedules with motors (mechanical systems)	
motor horsepower:	-
number of phases:	-
minimum efficiency:	-
motor type:	-
# of poles:	-

**G**  
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member, American Institute of Architects  
184 East Chestnut Street • Asheville, NC 28801  
ph 828-251-2357 • fax 828-225-0530  
gstowearchitect@bellsouth.net  
www.GeorgeStoweArchitect.com



3-14-2014

DATE:  
January 30, 2014

REVISIONS:  
3-14-2014

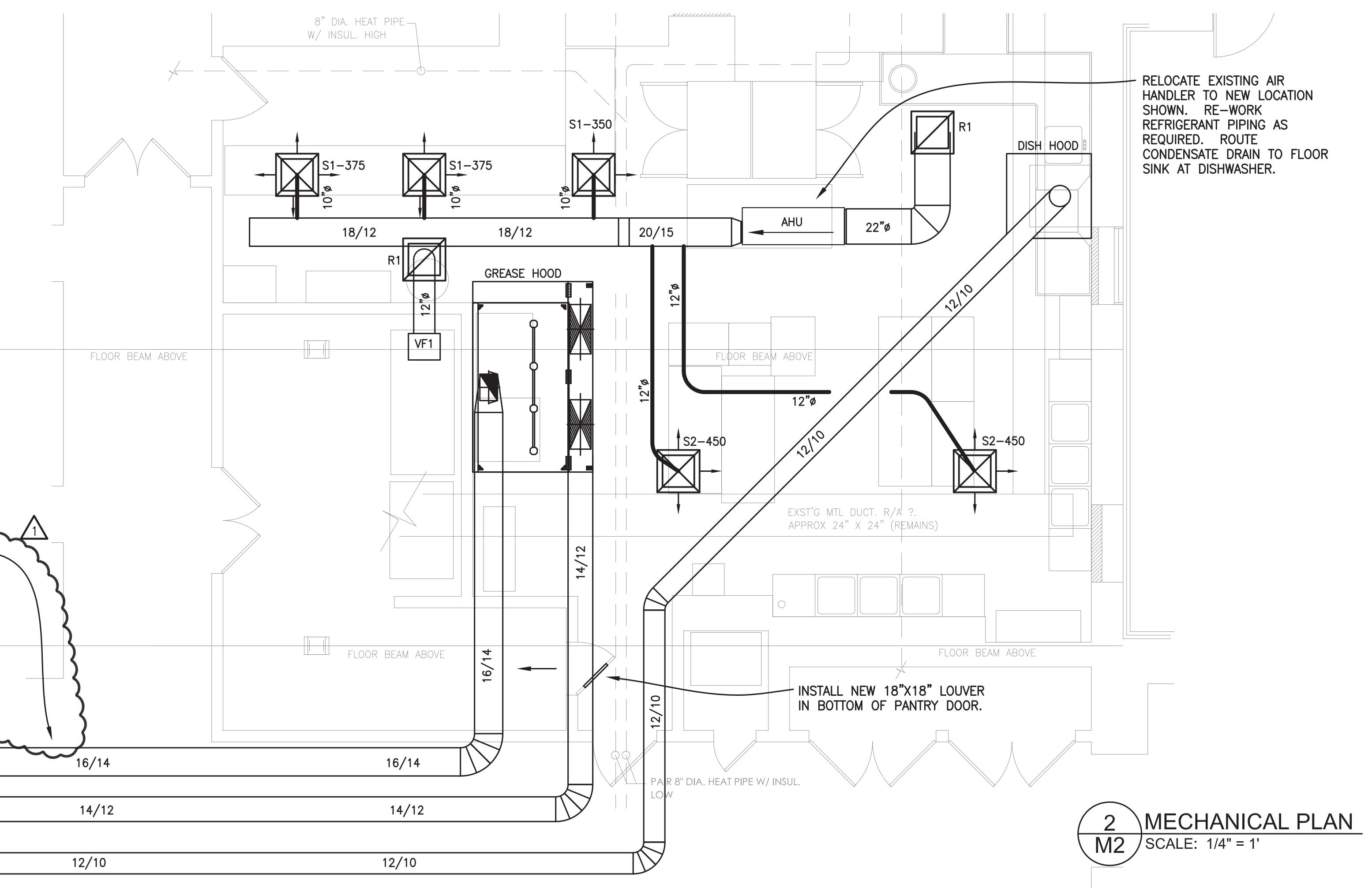
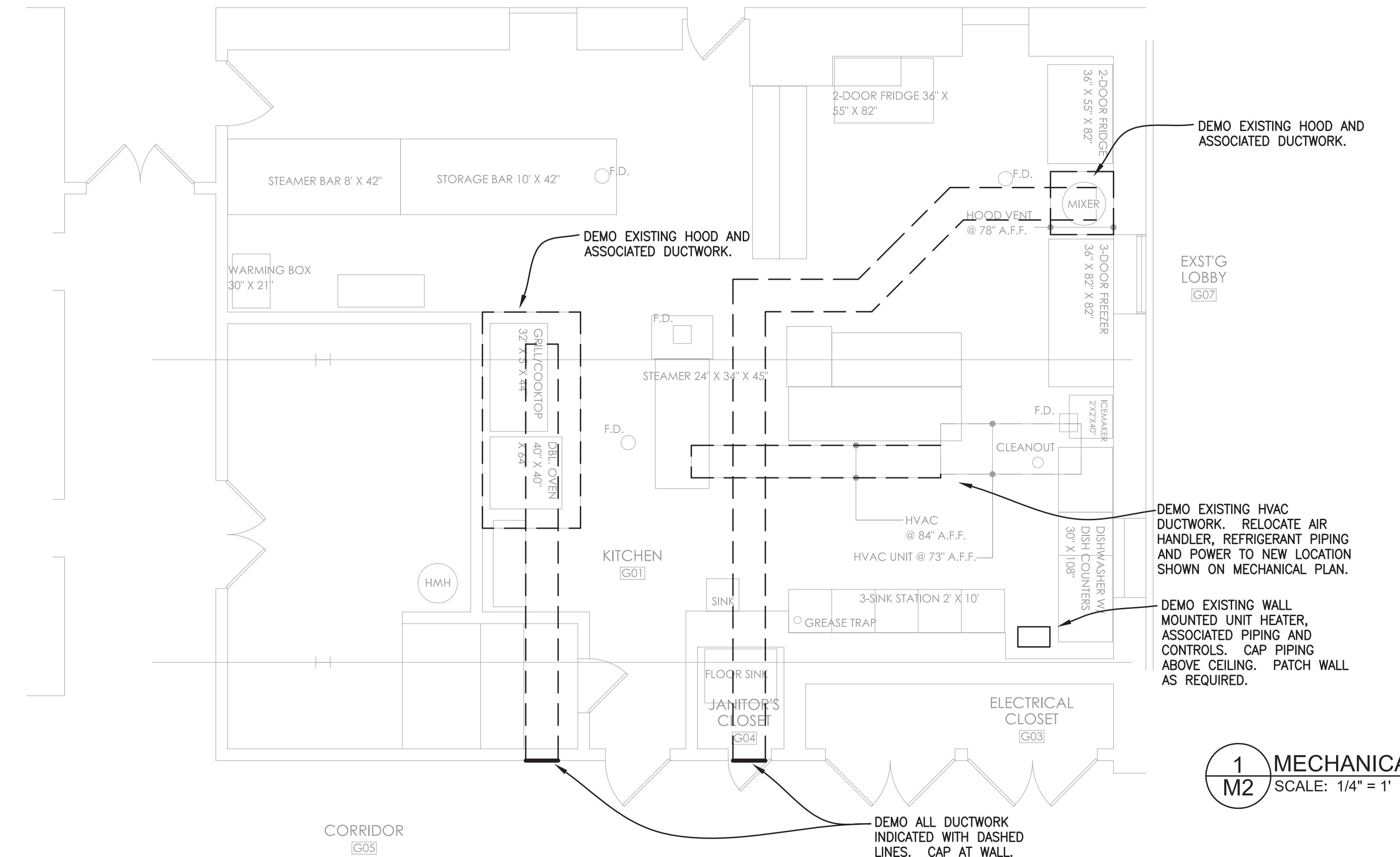
**FIRST PRESBYTERIAN CHURCH**  
Asheville, NC  
40 Church St.

M2



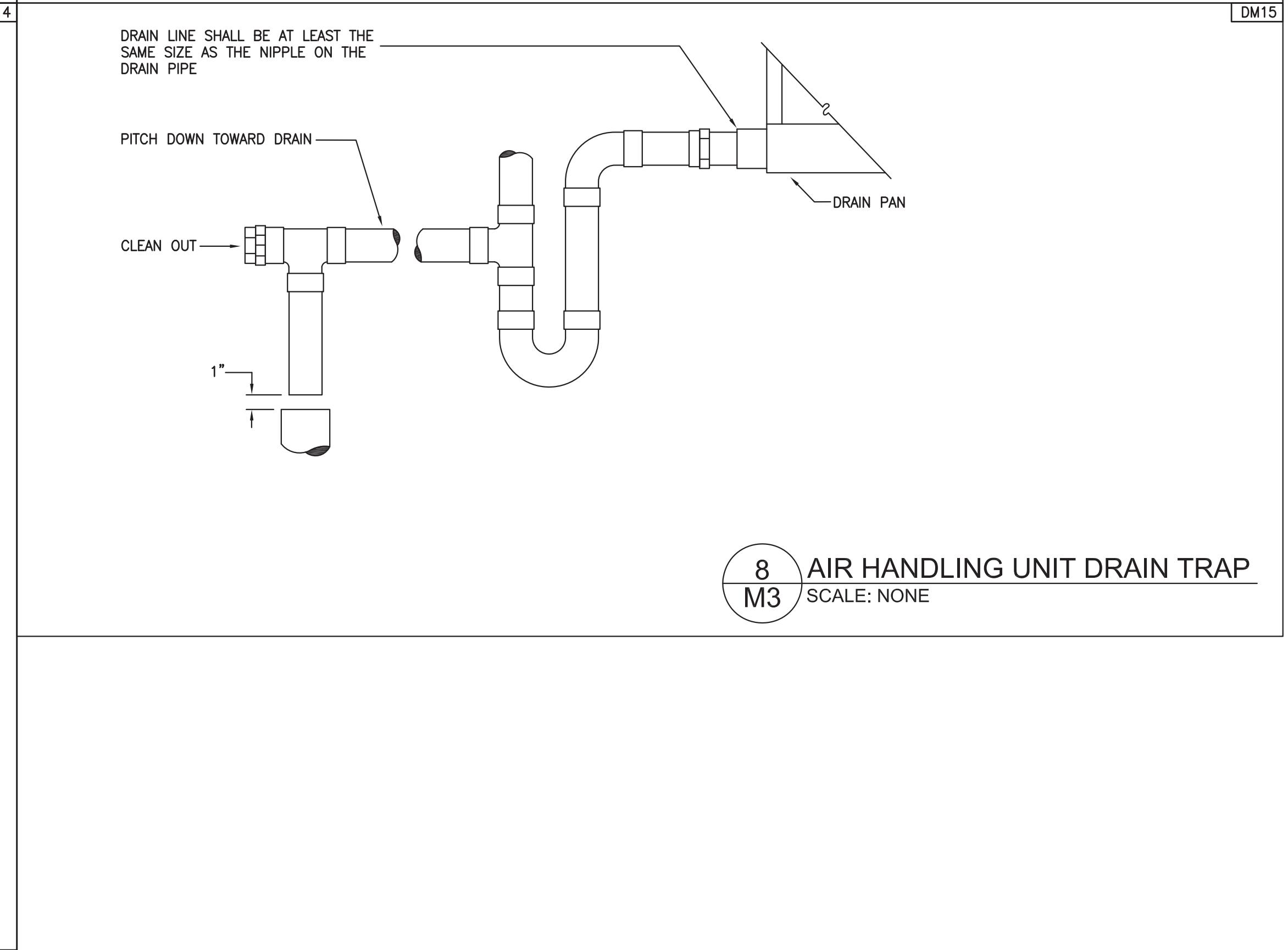
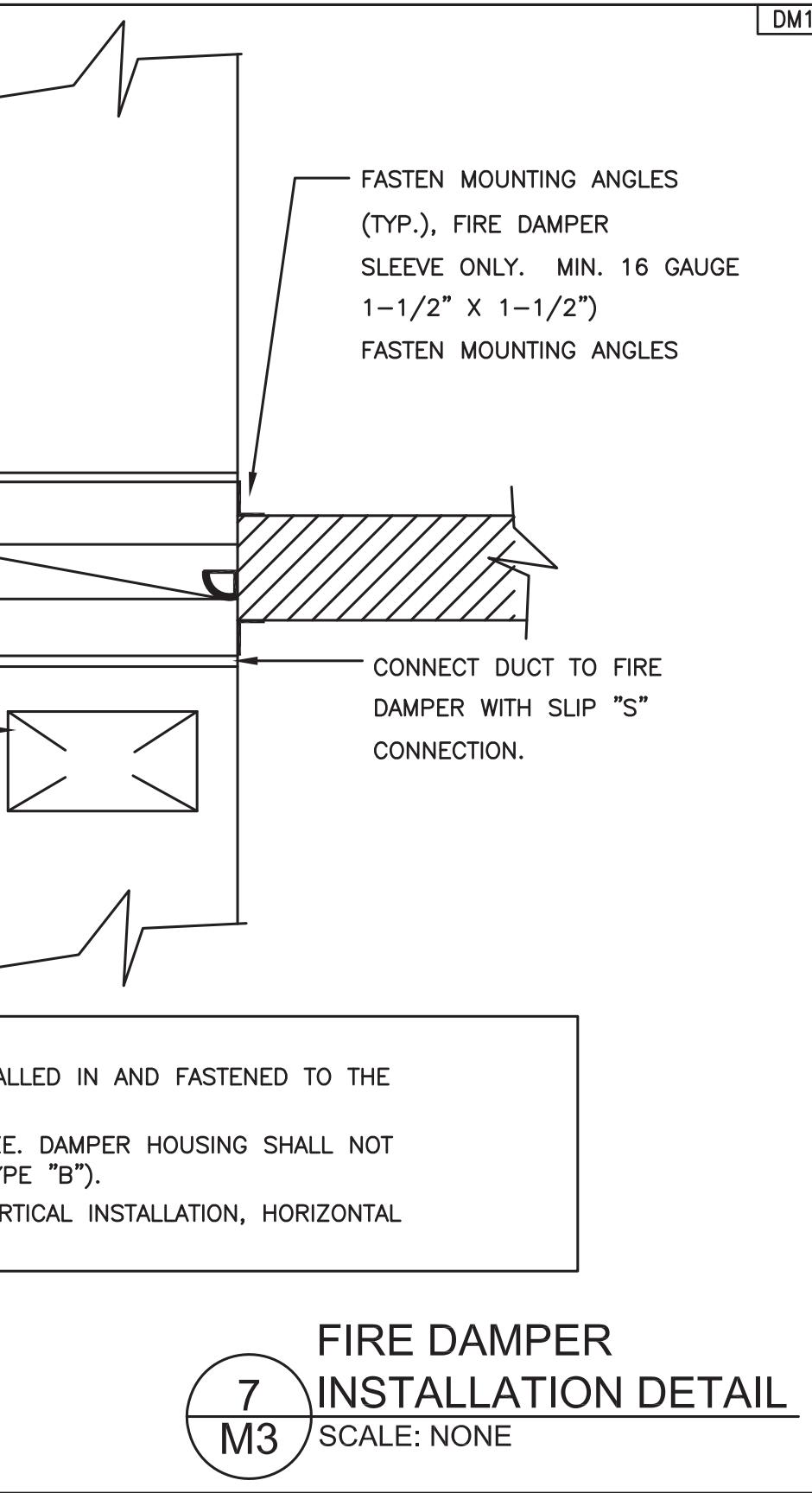
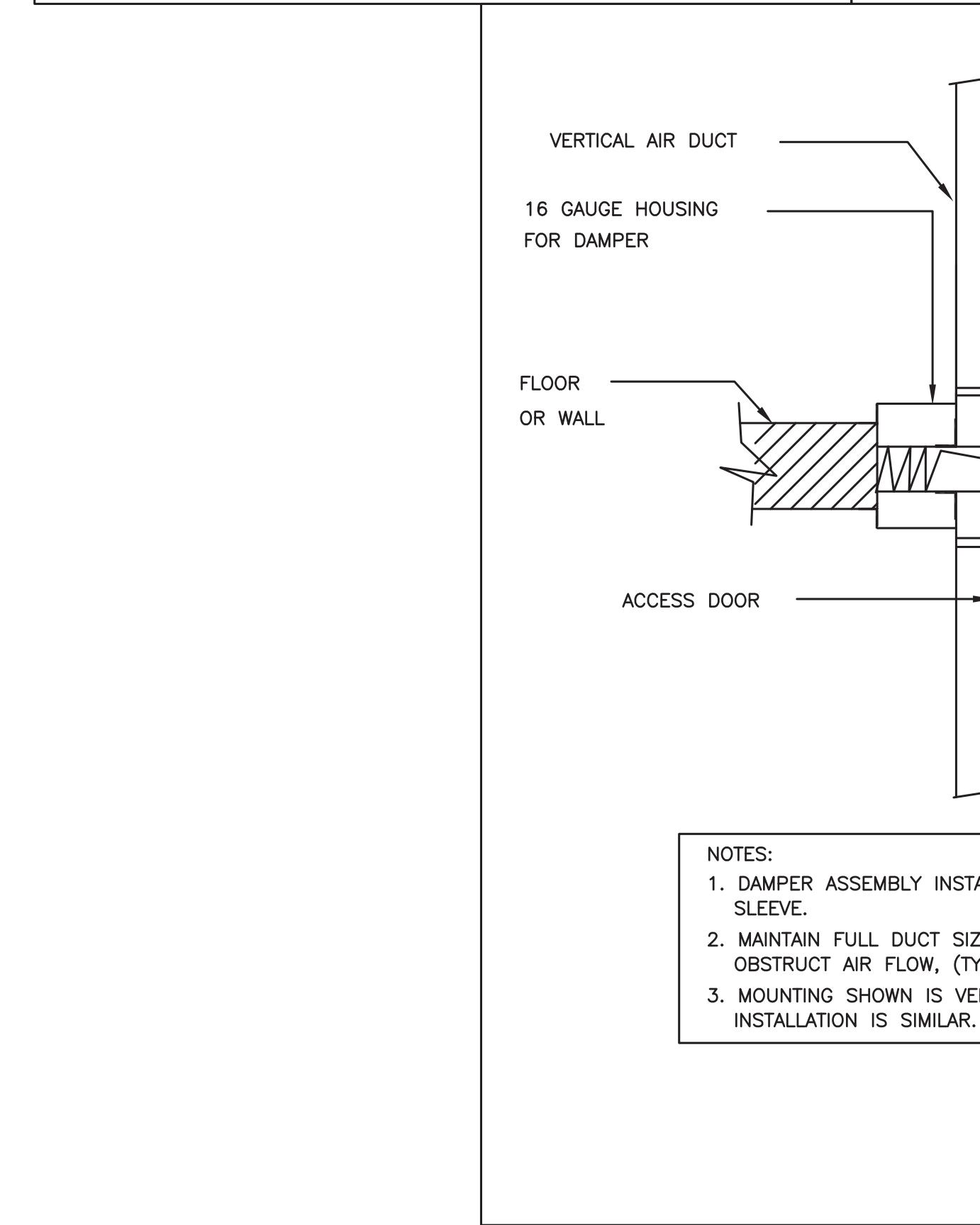
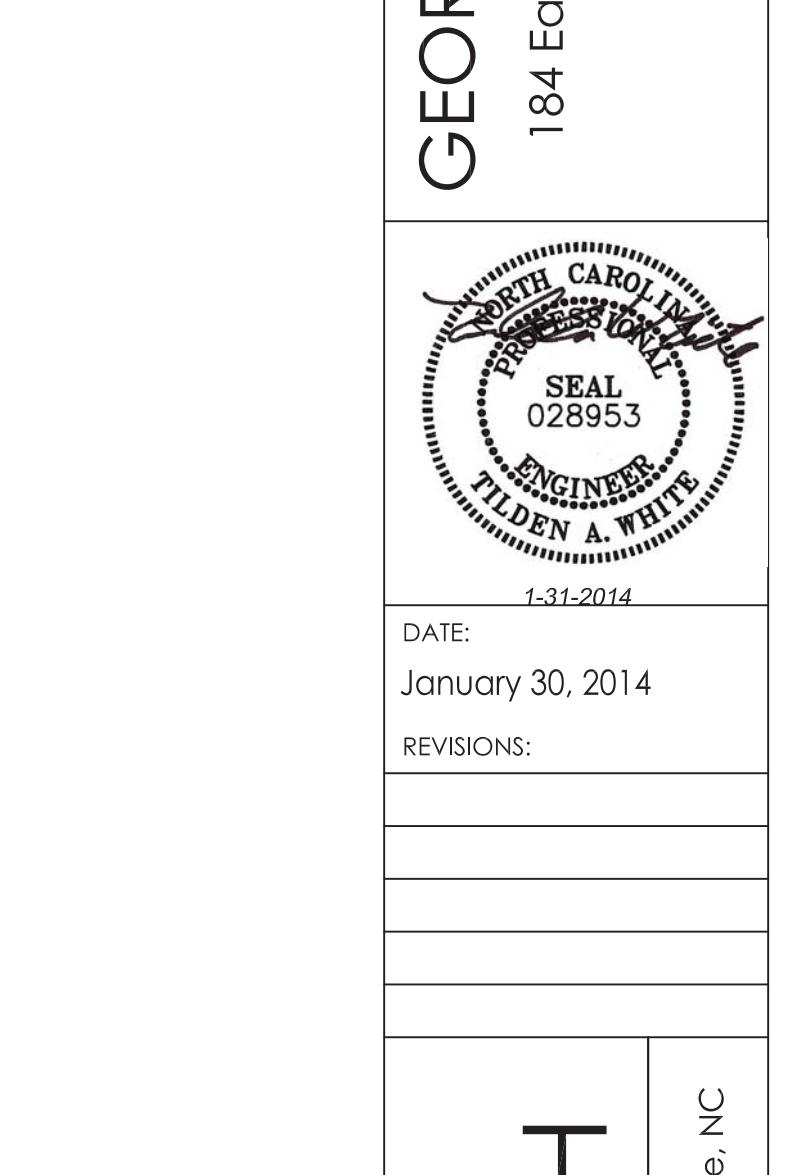
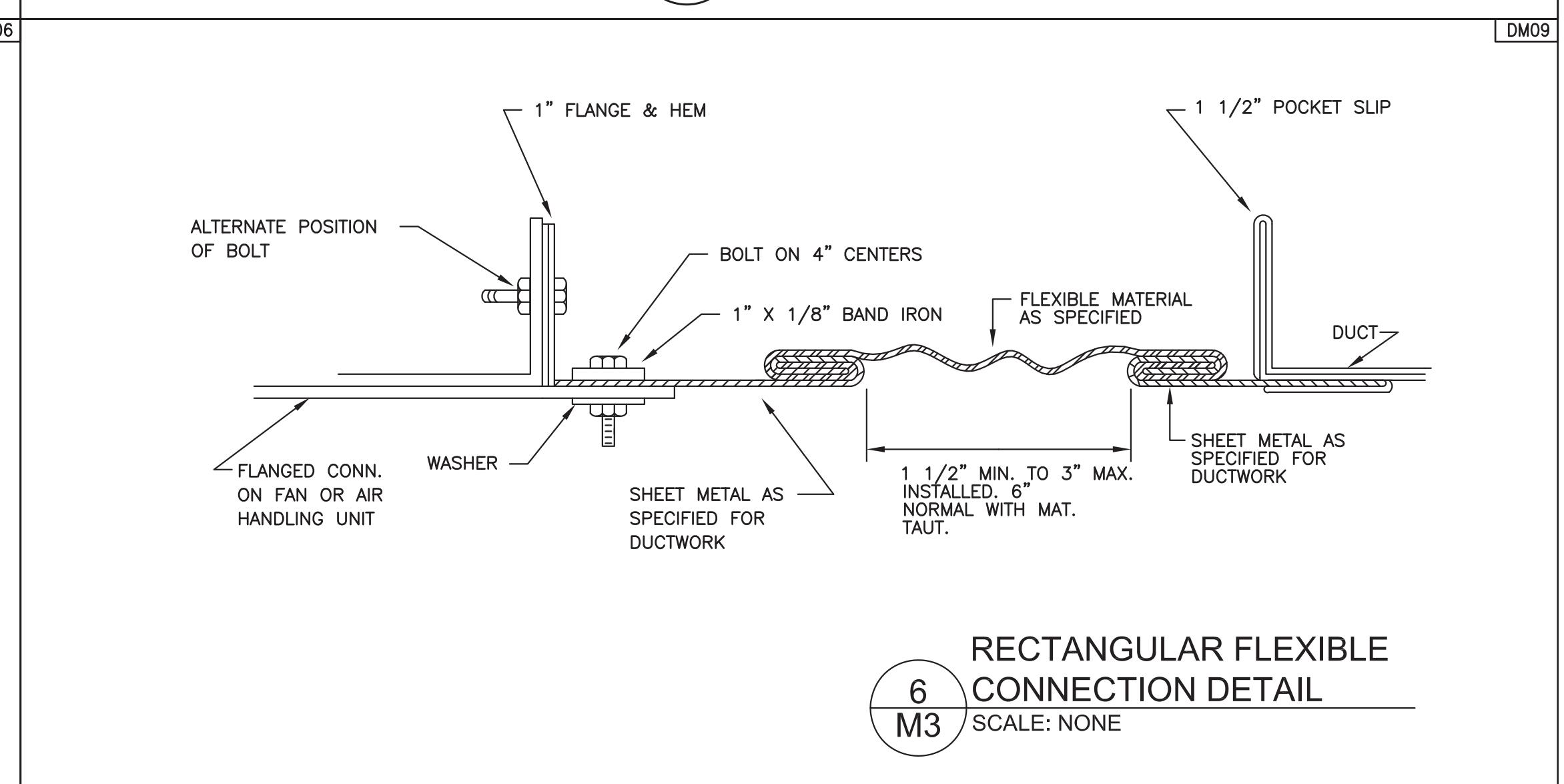
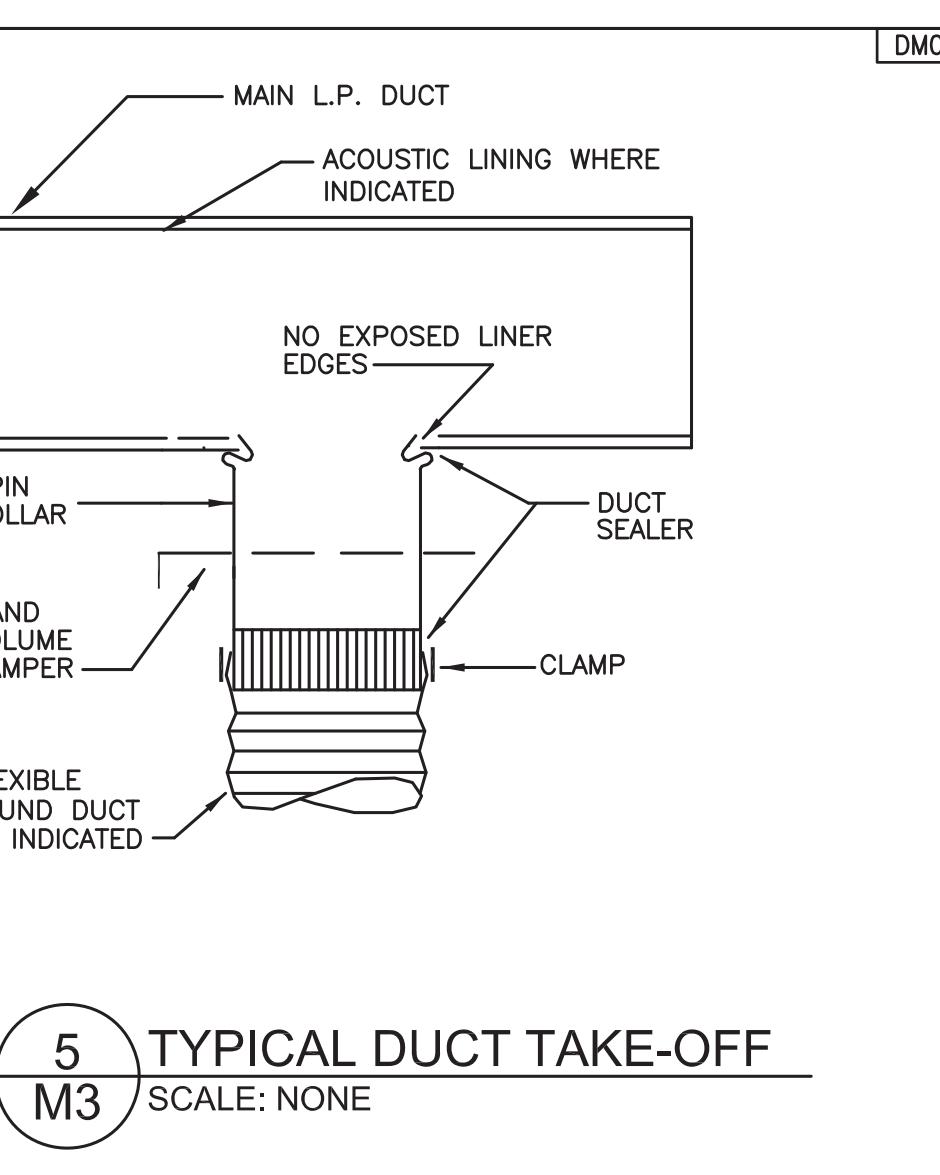
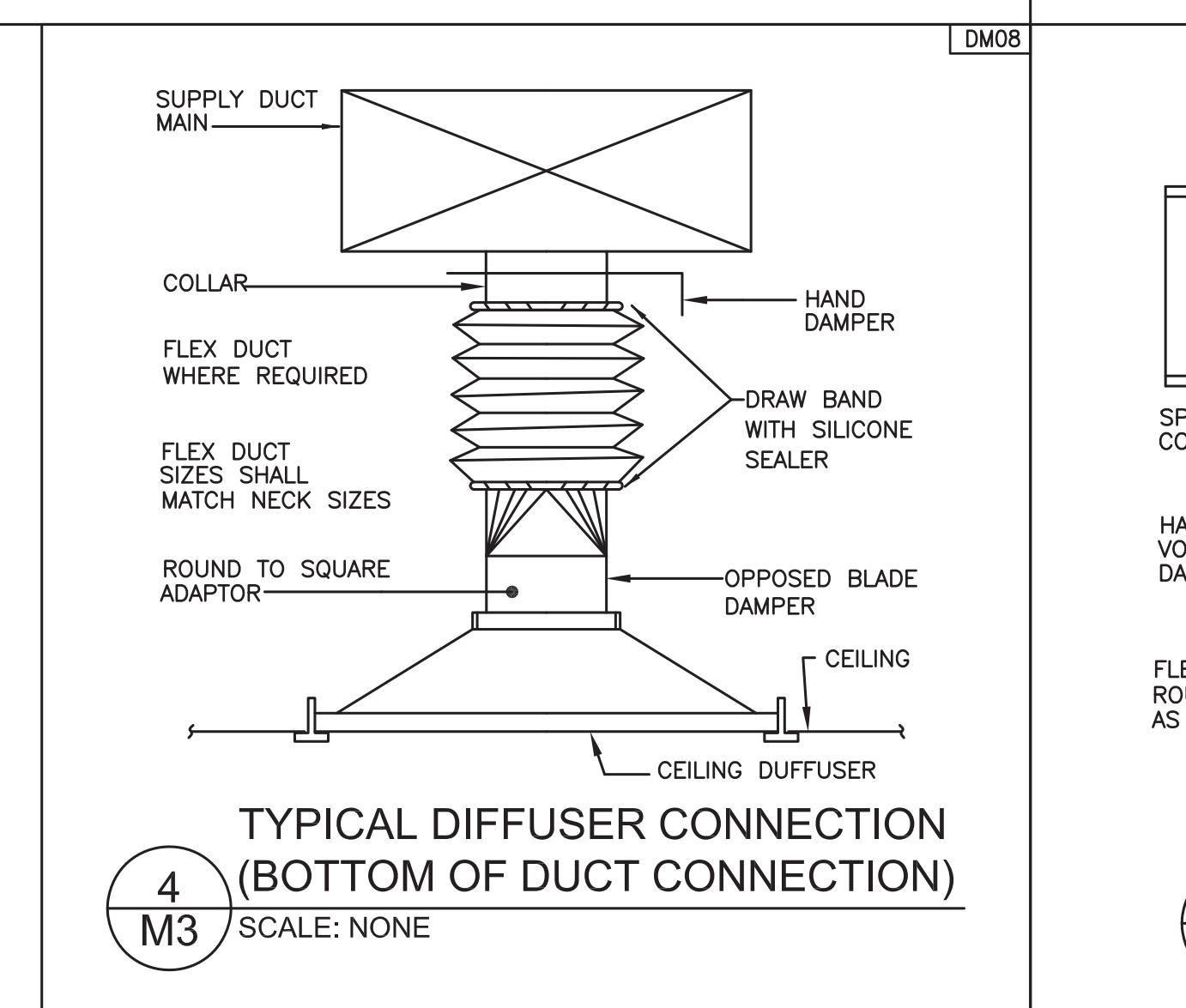
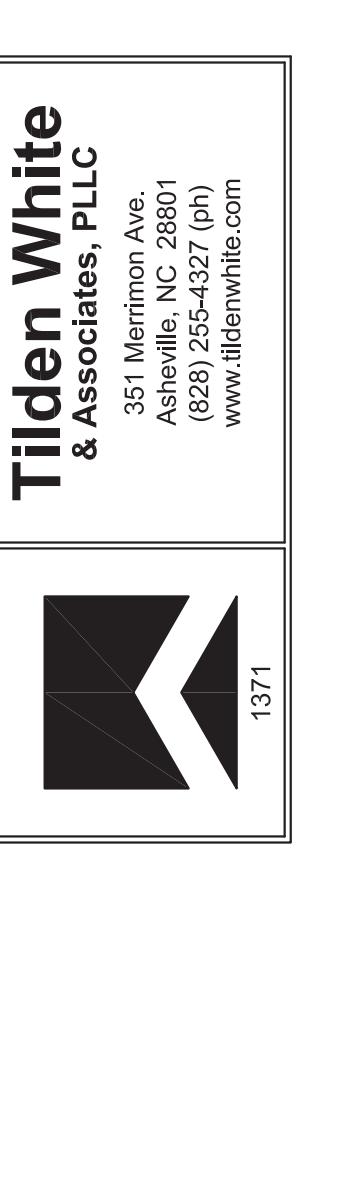
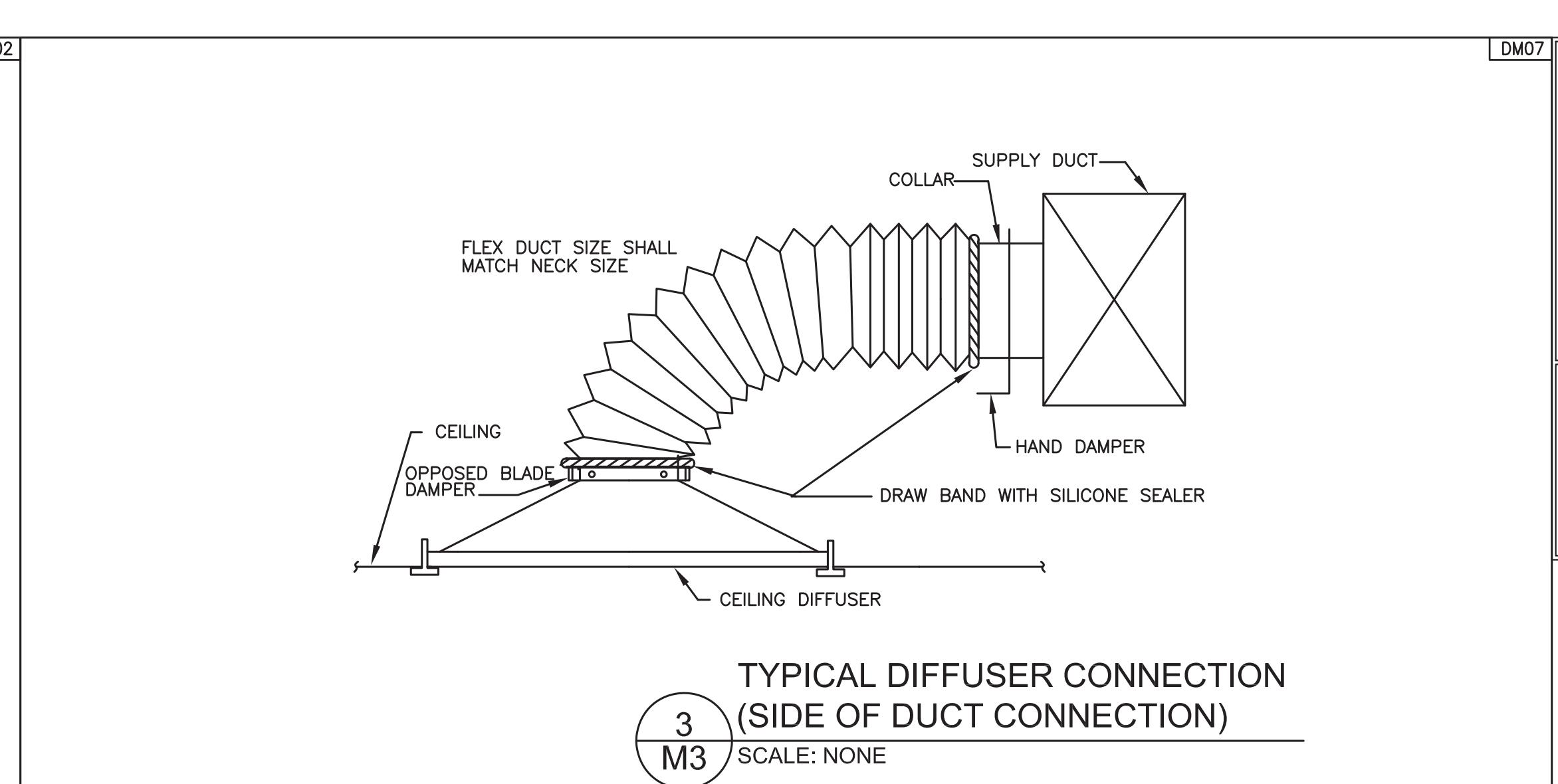
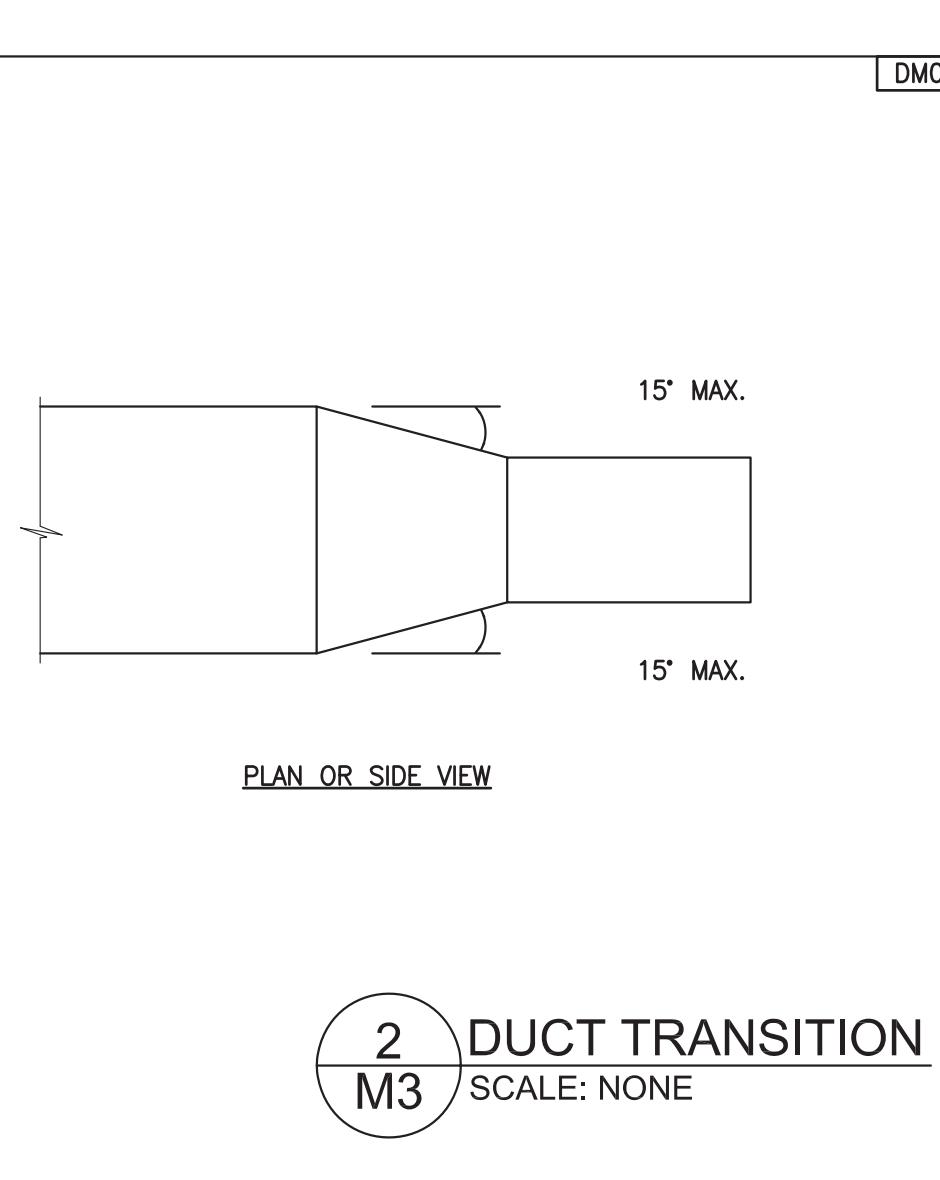
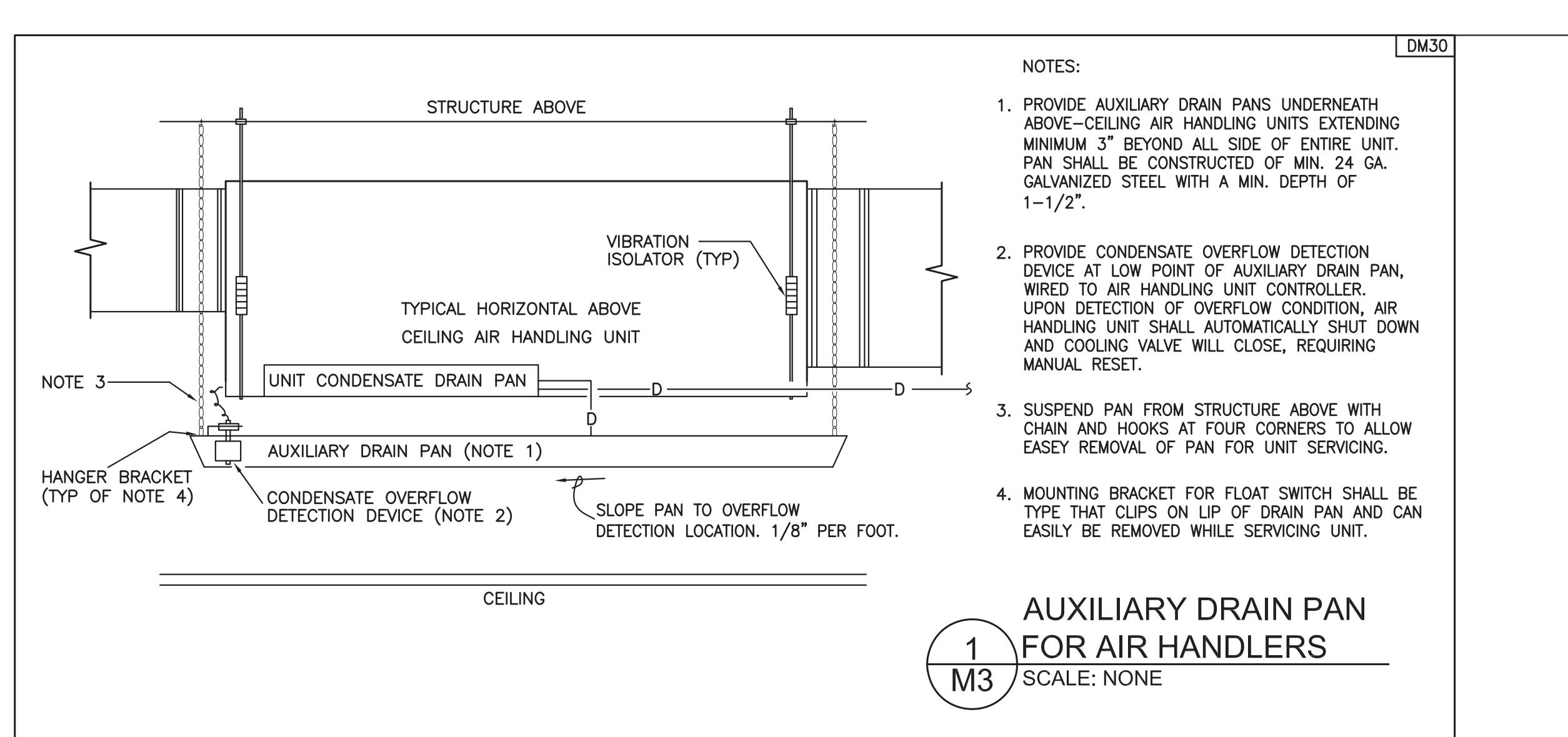
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1371



EXISTING FRESH AIR LOUVER  
FIELD VERIFY EXISTING ROUTING. COORDINATE WITH STRUCTURE AND EXISTING DUCTWORK, PIPING, ETC. MODIFY ROUTING AS REQUIRED. THIS AREA HAS LAY-IN CEILINGS.  
EXISTING FRESH AIR LOUVER  
CLARIFICATION FOR MECHANICAL NOTE 13 ON SHEET M1:  
PER CODE, ALL GREASE DUCT MUST BE INSTALLED MINIMUM 18" CLEAR TO COMBUSTIBLES. OTHERWISE, FIRE-WRAP AS REQUIRED.  
SUPPORT FANS FROM STRUCTURE. FIELD VERIFY EXISTING CONDITIONS BEFORE SUBMITTING BIDS AND BEGINNING WORK.  
ROUTE GREASE DUCTWORK UP SIDE OF BUILDING TO 10' FROM DOOR OPENING AND MOUNT GREASE EXHAUST FAN MOUNTED UP AT A 45 DEGREE ANGLE.  
ROUTE DISHWASHER EXHAUST DUCTWORK UP SIDE OF BUILDING AND TERMINATE WITH SIDE EXHAUST LOUVERS 10' AWAY FROM DOOR.

Kitchen Remodel for:



BRANCH CIRCUIT CONDUCTOR SIZING TABLE			
For circuits with branch circuit protection rated 20 amps or less, copper conductors shall be sized according to the following:			
voltage	distance (ft)	home run (AWG)	remainder (AWG)
120	0 - 50	12	12
	50 - 90	10	12
	90 - 140	8	10
	140 +	6	10
208	0 - 95	12	12
	95 - 160	10	12
	160 - 250	8	10
	250 +	6	10

WIRING DEVICE NOTES			
1. Switches shall be Hubbell CS115 or equivalent and receptacles shall be Hubbell CR20 or equivalent. Devices shall be white or as directed by architect.			
2. Switches shall be as follows:	single pole 20 amp 3 way 20 amp 4 way 20 amp motor starter switch	CSB20AC1-I CSB20AC3-I CSB20AC4-I Square D type "K" series	
3. Duplex receptacle shall be as follows:	20 amp duplex 20 amp duplex-GFCI 20 amp duplex-Weather GFI	PS5362I 2095IL 2095TRWI	
Note: Duplex receptacles have nylon face and side wire type. Receptacles shall have brass contacts, brass terminal screws and green ground wire screw. GFCI receptacle shall be included with a trip indicator light.			
4. Coverplates shall be oversized stainless steel SSJX or as directed by architect.			
5. Outlet boxes shall not be mounted back-to-back.			
6. Receptacles shall be 20 amp unless 15 amp is required by equipment served.			
7. Weatherproof in use covers shall be clear equal to Leviton. For horizontal mount covers use part no. "597-CL". For vertical mount covers use part no. "5977-CL".			
8. All outlets (including telephone and data) shall have cover plates.			

ELECTRICAL NOTES			
1. The intent of these drawings and specifications are to describe the installation of a complete, fully adjusted, and operational system.			
2. Provide five sets of electrical equipment submittals to the GC for the architect, engineer, GC and owner to review and approve prior to purchasing.			
3. The contractor shall provide all supervision, labor, material, equipment, machinery, and any and all other items necessary to complete the system. All work shall be performed in a neat and workmanlike manner in accordance with industry standards.			
4. All work under this section shall be accomplished in strict accordance with state building codes and the National Electric Code. Coordinate with local power company requirements.			
5. The contractor shall obtain all necessary approval, obtain all permits and pay all fees required for the installation of their work.			
6. The drawings are diagrammatic only. The contractor may need to make field adjustments to accommodate actual field conditions.			
7. Devices located in rated walls shall have sufficient separation from other devices to allow proper installation and firestopping.			
8. The contractor shall refer to the architectural and structural drawings for the general construction of the building, for floors and ceiling heights, for locations of wall, partitions, beams, etc.			
9. Manufacturer's listed are to establish a standard of quality and not intended to limit the selection to these manufacturers.			
10. Contractor shall verify all listed model numbers with manufacturers to insure proper application of equipment.			
11. Equipment and materials shall be handled, stored and protected in accordance with the manufacturer's recommendations.			
12. The contractor shall perform any and all trenching, excavation and backfilling required for the installation of this work.			
13. The contractor shall furnish all necessary scaffolding, staging, rigging and hoisting required for the completion of this work.			
14. All work shall be coordinated with the general contractor and other trades involved in the construction project. All work shall be carefully laid out in advance to coordinate architectural, structural, mechanical, plumbing and electrical features of construction.			
15. The electrical contractor shall visit the site before submitting his bid so as to be thoroughly familiar with the job conditions and/or peculiarities. No extra payment will be allowed for anything which could have been anticipated from a visit to the site.			
16. Equipment shall be installed in accordance with manufacturer's written instructions.			
17. Provide grounding for all conduits, motor frames, metal casings, receptacles, system neutral, etc. and as required by NEC as minimum. Resistance to ground shall not exceed 25 OHMS.			
18. A green insulated copper ground wire, sized per NEC, shall be installed in all raceways, electric metallic tubing used for feeders, branch circuits, flexible conduit, and as otherwise noted on the drawings.			
19. All fixtures shown on the plans shall be furnished and installed, complete with all mounting accessories, lamps and tubes. Fixtures shall be independently supported from structure.			
20. All wiring shall be run in conduit. The minimum indoor conduit size shall be $\frac{1}{2}$ . Indoor conduit shall be electrical metallic tubing or type MC may be used for branch circuits where allowed by NEC and not subject to physical damage, moisture or dampness. Connection to equipment shall be flexible metal conduit except in wet or damp locations use liquid tight flexible metal conduit. Indoor boxes and enclosures shall be NEMA type 1, except in damp or wet locations use NEMA type 4, stainless steel. Where nonmetallic conduit is used below the slab provide rigid conduit to turn up into the building space or at all exterior walls, poles or equipment. Use raceway fittings compatible with raceway and suitable for use and location. Run concealed raceways with a minimum of bends in the shortest practical distance considering the type of building construction and obstructions. Raceways shall run parallel to or at right angles to nearby surfaces or structural members, and follow the surface contours as much as practical. Provide grounding connections for raceway, boxes, and components as indicated and instructed by manufacturer. Tighten connections and terminals, including screws and bolts, according to equipment manufacturer's published torque-tightening values for equipment connectors. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals according to tightening torques specified in UL standard 486A.			
21. Color for devices shall be coordinated with the general contractor.			
22. Receptacles shall comply with UL Standard 498, "electrical attachment plugs and receptacles," heavy-duty grade 20 AMP rated except as otherwise indicated.			
23. Ground-fault circuit interrupter (GFI) receptacles shall comply with UL Standard 943, "Ground fault circuit interrupters," with integral NEMA 5-20R duplex receptacle.			
24. Single pole and three/four-way toggle type snap switches shall be 20 AMP 120/277 V. A.C., rated, quick-type A.C. switches. NRTL listed and labeled as complying with UL Standard 20 "general use snap switches," and with federal specification W-S-896.			
25. Wall plates: single and combination types shall be 302 stainless steel that mate and match with corresponding wiring devices.			
26. Conductors shall be color coded in accordance with NEC as follows:			
Phase 208/120 Volts 480/277 Volts			
A Black Brown			
B Red Orange			
C Blue Yellow			
Neutral White Gray			
Ground Green Green			
27. Electrical equipment shall be identified with labels of engraved plastic-laminate on each major unit of electrical equipment.			
28. All wiring for equipment shall be copper with one of the following types of insulation: THW, THHW, THWN with a rating of at least 75 DEG. C. All wiring located above the ceiling shall be plenum-rated.			
29. Final locations of all exit and emergency lights shall be verified with the building inspector prior to installation.			
30. Branch circuits shall not exceed 80% of overcurrent protection. Devices shall be relocated to another circuit if found to be in excess of 80%.			

2012 APPENDIX B BUILDING CODE SUMMARY: ELECTRICAL SYSTEM AND EQUIPMENT			
<b>Method of Compliance:</b>			
Prescriptive Performance Energy Cost Budget			
<b>Lighting schedule</b>			
lamp type required in fixture (see fixture schedule) number of lamps in fixture (see fixture schedule) ballast type used in the fixture (see fixture schedule) number of ballasts in fixture (see fixture schedule) total wattage per fixture (see fixture schedule) total interior wattage specified vs. allowed 0.8 kW vs. 1.2 kW total exterior wattage specified vs. allowed N/A			
<b>Equipment schedules with motors</b> (not used for mechanical systems)			
motor horsepower n/a number of phases n/a minimum efficiency n/a motor type n/a # of poles n/a			

LIGHTING FIXTURE SCHEDULE																
TAG	TYPE					VOLTAGE	Fixture Watts	LAMPS			Mounting					
	INCAND.	FLOUR.	LED	METAL HAL.	H.P.S.			NUMBER	WATTS & OR TYPE	RECESSED	CEILING	PENDANT	WALL	LANDSCAPE		
A		X				120	77	-	7200 lumen LED	X				-	2 x 4 Troffer	Lithonia 2GTL-4-72L-FN-A19-LP835
X1		X				120	0.6	-	LED		X				EXIT SIGN	LITHONIA LQC-W-1-R-ELN
X2		X				120	1.4	-	LED			X			INTERIOR EMERGENCY LIGHTS	LITHONIA ELM2

1. CONTRACTOR SHALL COMPLY WITH INSULATION CONTACT (IC) RATING FOR RECESSED FIXTURES WHERE INSULATION IS INSTALLED DIRECTLY ABOVE. CEILING (SEE ARCHITECTURAL SHEETS).

2. VERIFY MOUNTING HEIGHT WITH OWNER PRIOR TO INSTALLATION

Tillden White & Associates, PLLC  
member, American Institute of Architects



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www.GeorgeStoweArchitect.com

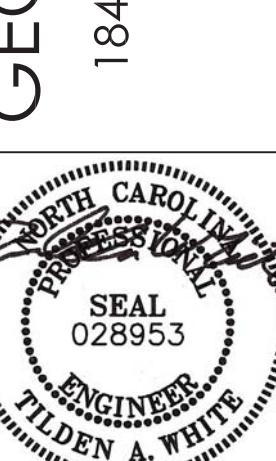
1-31-2014  
January 30, 2014  
REVISIONS:

Kitchen Remodel for:  
FIRST PRESBYTERIAN CHURCH  
Asheville, NC

40 Church St.  
George Stowe Architect

G  
S  
ARCHITECT

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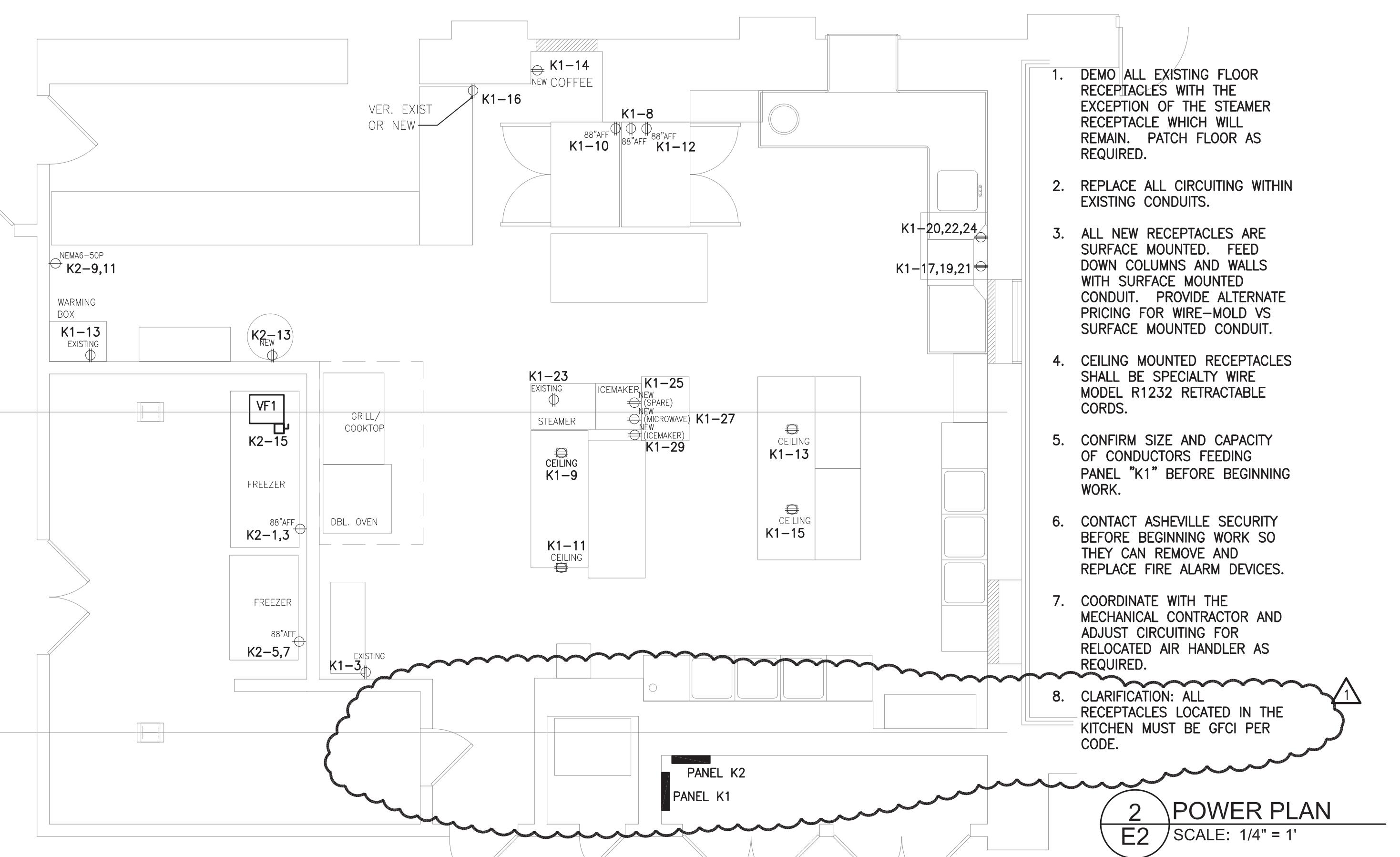
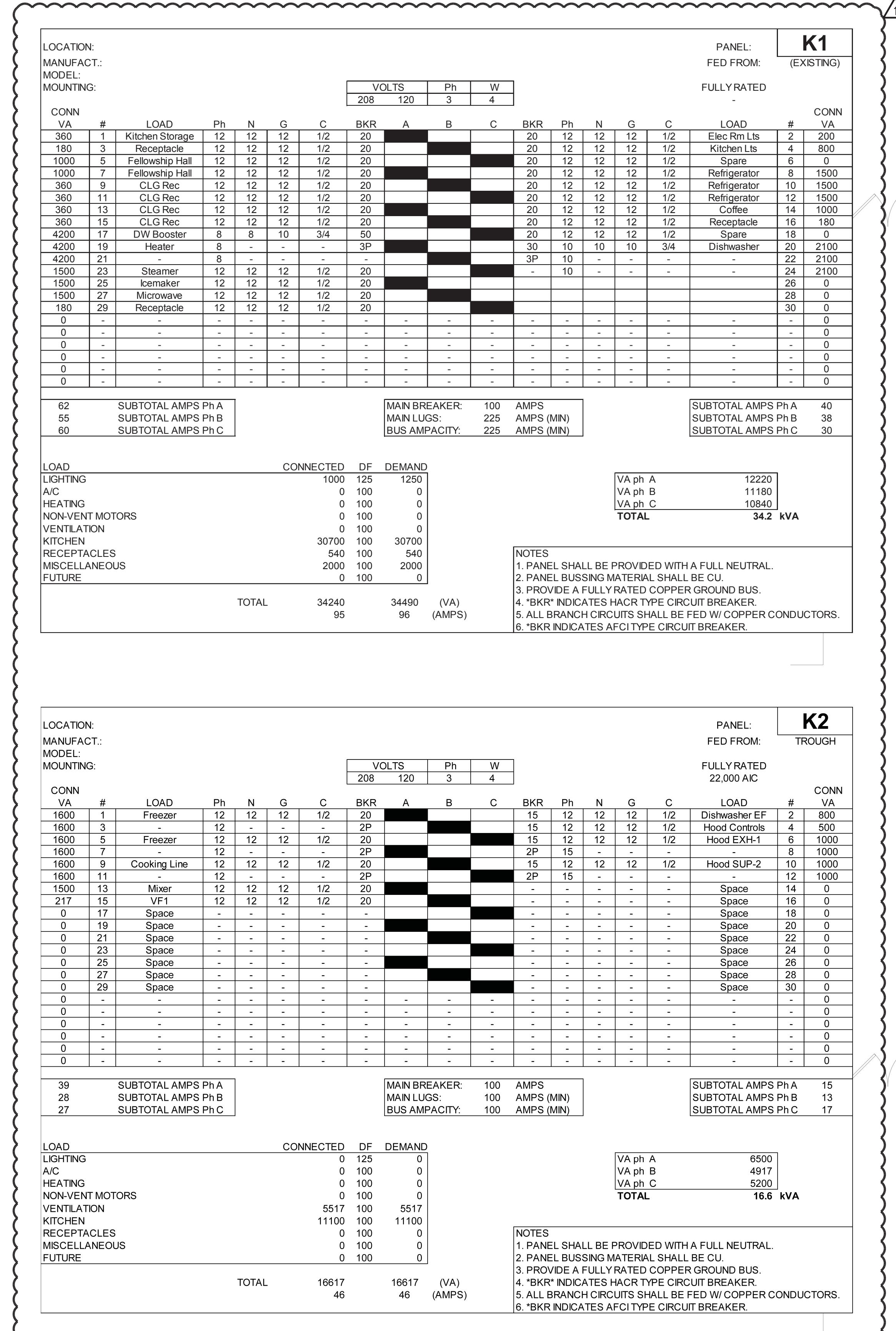


## FIRST PRESBYTERIAN CHURCH

Asheville, NC

Kitchen Remodel for:

E2





**FIRST PRESBYTERIAN CHURCH**

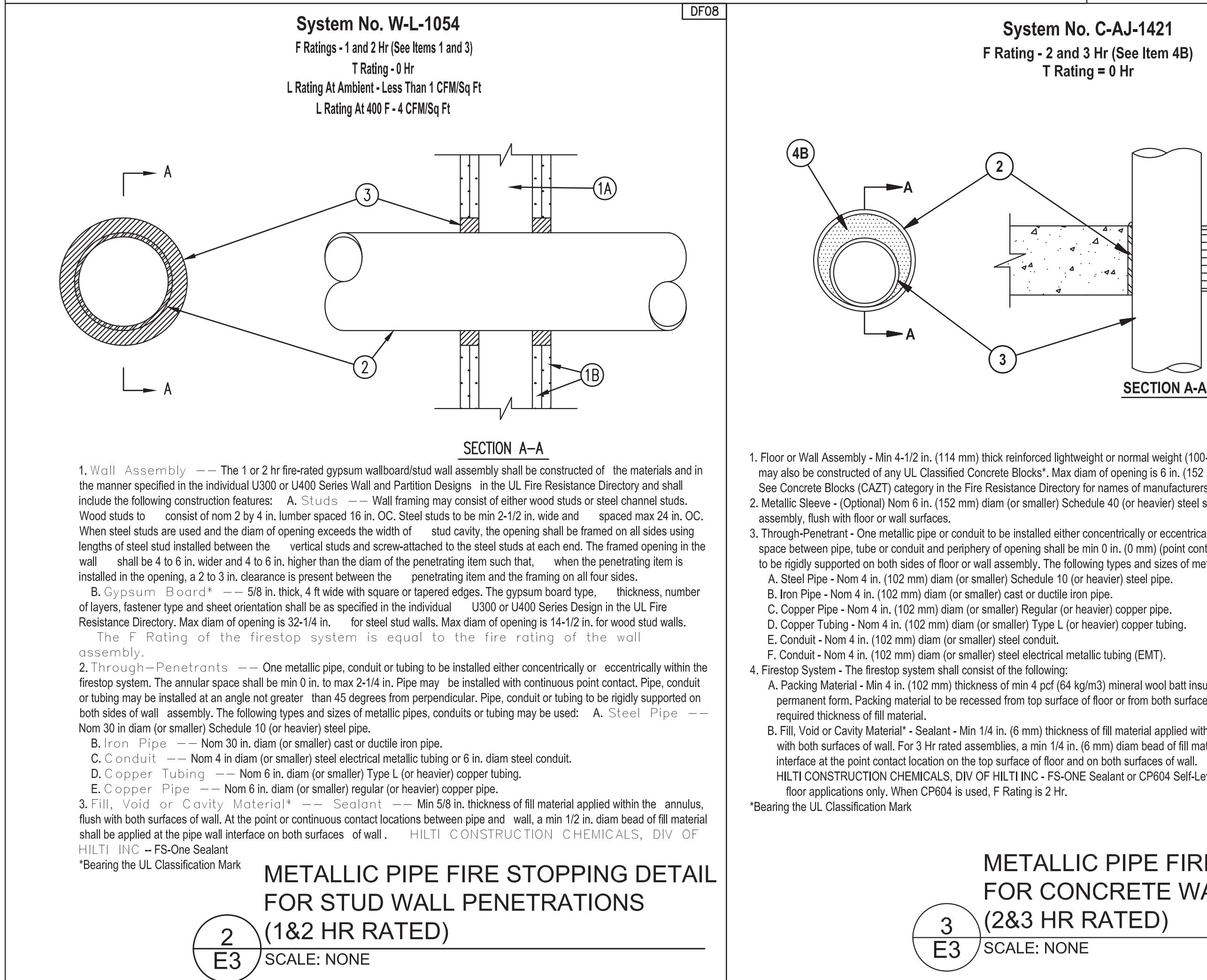
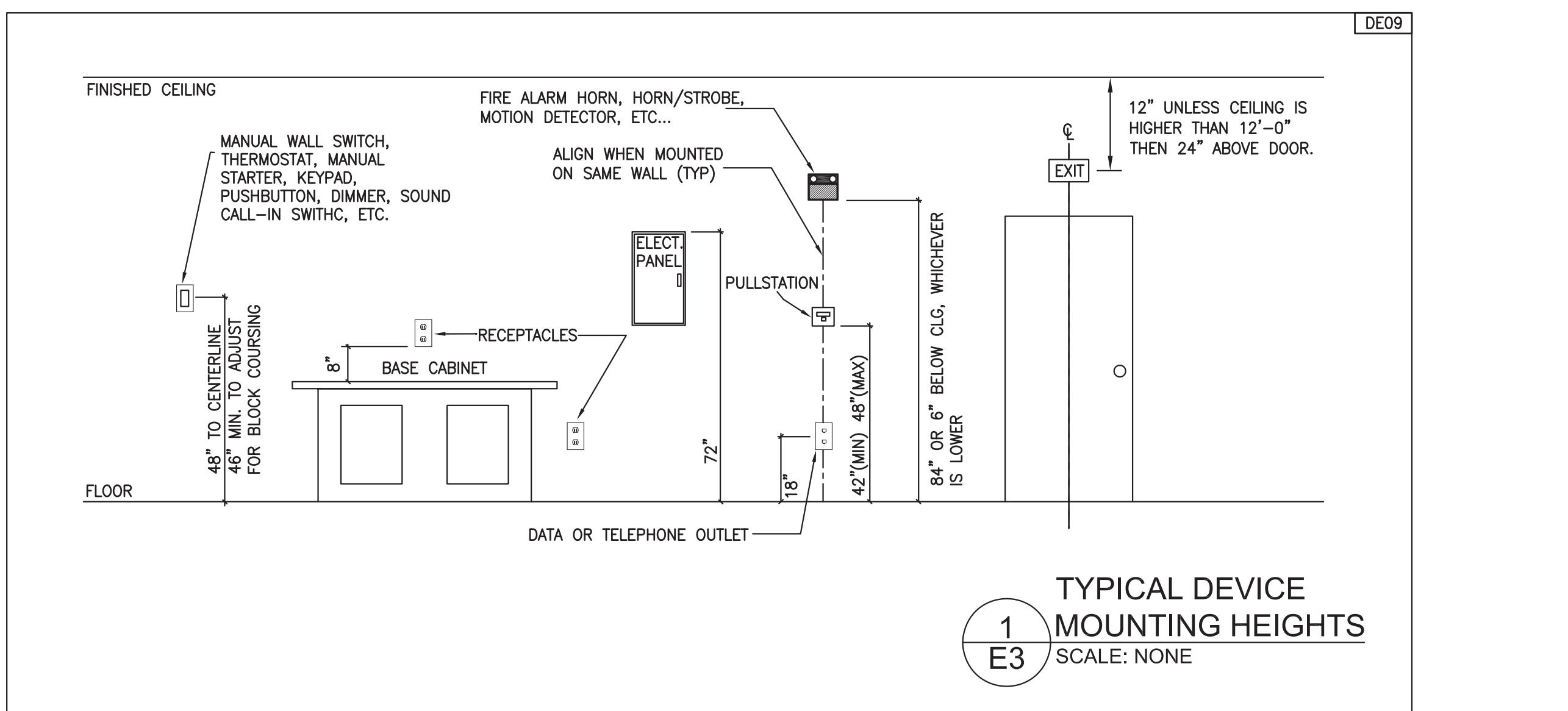
40 Church St.

E3

Kitchen Remodel for:



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# CaptiveAire

Blue Ridge

607 5th St. NW, Hickory, NC, 28601 PHONE: (828) 324-4413 FAX: (919) 227-5933 EMAIL: reg16@captiveaire.com

1st Presbyterian Church  
ASHEVILLE, NC

**DATE:** 1/31/2014  
**DWG #:** 1901157  
**DRAWN BY:** MHB - 16  
**SCALE:** 3/4" = 1'-0"  
**MASTER DRAWING**

**SHEET NO.**  
2

REVISIONS	
△	DESCRIPTION
△	DATE:
△	
△	
△	



www.captiveaire.com

## EXHAUST FAN INFORMATION - Job#1901157

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1		NCA14FA	1600	1.000	1189	1.000	1	208	7.0	154	12.7
3		TICF122A1-CA	600	0.500	1136	0.250	1	115	4.8	192	4.1

## MUA FAN INFORMATION - Job#1901157

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	CFM	ESP.	RPM	H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
2		INLINE1L-G10	G10	INLINE1L	1360	0.500	819	0.500	1	208	4.0	189	7.9

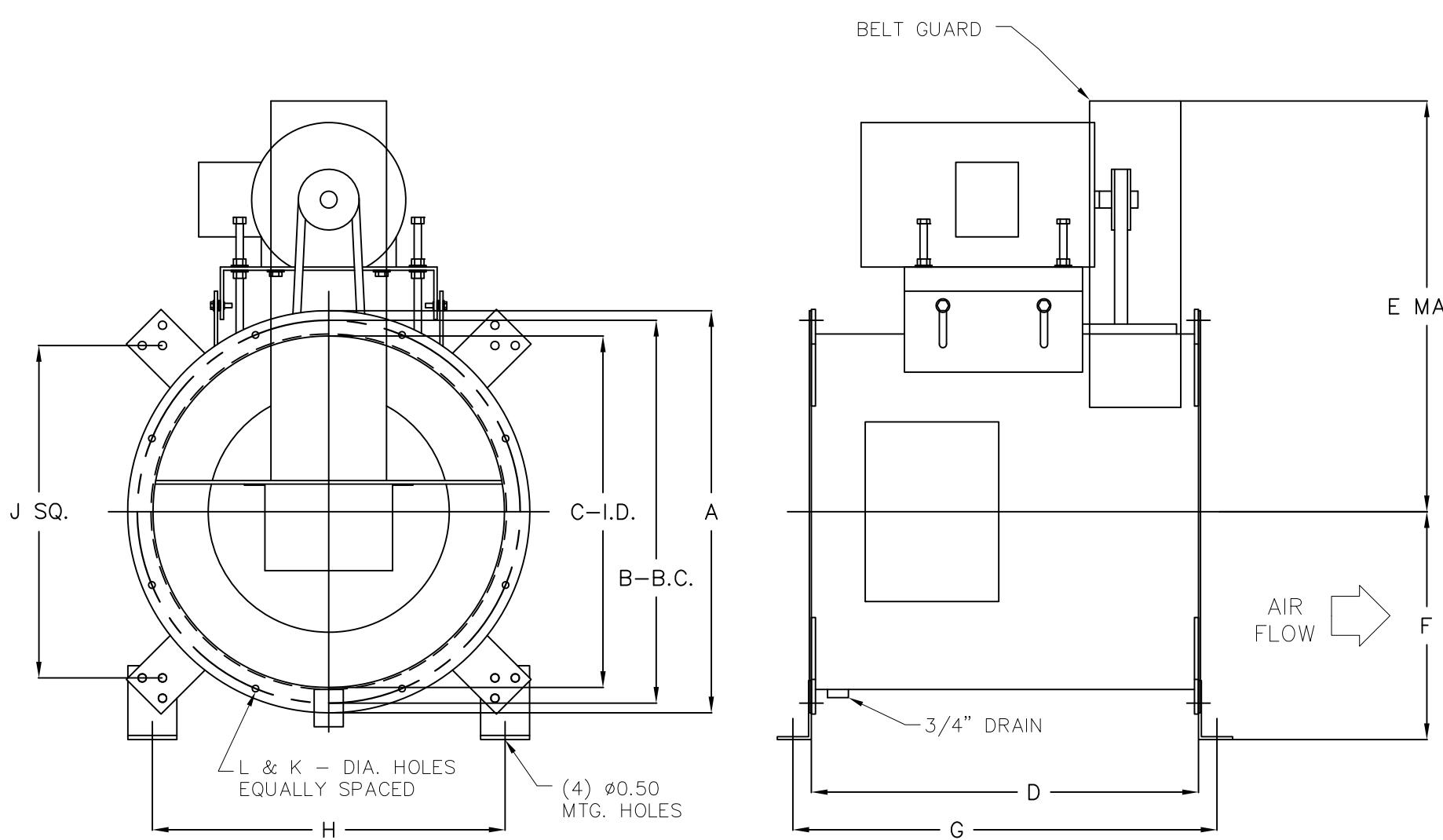
## FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Grease Box
		1 - Extra Set of Belts
		1 - Wallmount 24.25" sq. x 2"
2		1 - Extra Set of Belts
		1 - INLINE1 Indoor Hanging Option - Includes 2 HSA125 Hanging Spring Isolators per Uni-Strut
3		1 - Extra Set of Belts
		1 - 1 Hanging Spring Vibration Isolators (Set of 4), For Indoor or Outdoor use with Square Inline fans.

## FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1			YES					
2			YES					

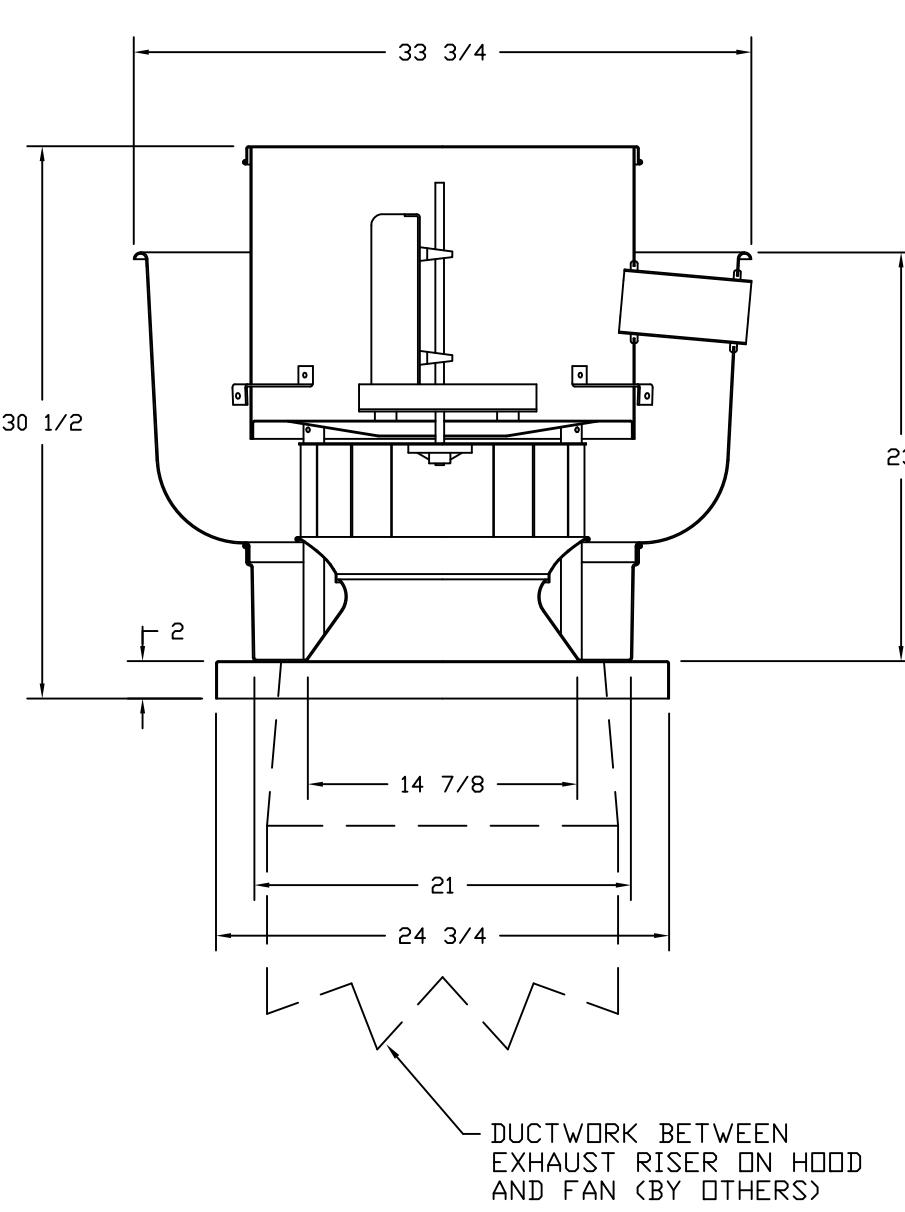
## TUBULAR CENTRIFUGAL INLINE FAN



TICF - TUBULAR CENTRIFUGAL INLINE FANS.

FAN MODEL	A-D.D.	B-B.C.	C-I.D.	D	E-MAX	F	G	H	J-SQ.	L	K	SHAFT	WEIGHT
TICF105	19 5/8	17 7/8	16 1/8	19 1/2	21	11 1/2	22 1/4	17 7/8	16 11/16	8	9/16	3/4	146 LBS
TICF122	21 3/4	19 7/8	18 1/4	20 1/2	22 1/2	12 3/8	23 1/4	19 1/2	18 1/4	8	9/16	3/4	161 LBS
TICF135	24 3/4	22 7/8	21 1/4	23	25 1/4	13 3/8	25 3/4	21 1/2	20 1/4	8	9/16	3/4	181 LBS
TICF150	25 11/16	23 15/16	22 3/16	24	26 1/2	13 3/4	26 3/4	22 1/4	21	8	9/16	3/4	195 LBS

## FAN #1 NCA14FA - EXHAUST FAN



### FEATURES:

- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL761
- AMCA SOUND AND AIR CERTIFIED
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- WEATHERPROOF DISCONNECT
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

NORMAL TEMPERATURE TEST  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THE NORMAL TEMPERATURE AND WITHOUT ANY DEGRADING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

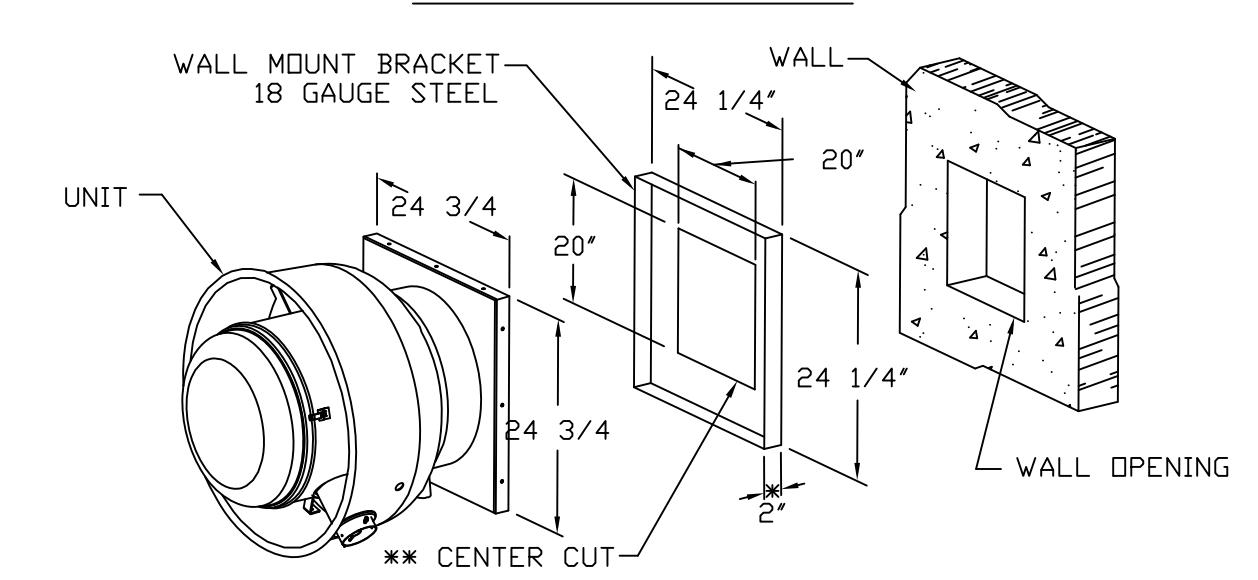
ABNORMAL FLARE-UP TEST  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (336°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

### OPTIONS

- GREASE BOX
- EXTRA SET OF BELTS
- WALLMOUNT 24.25" SQ. X 2"

DUCTWORK BETWEEN EXHAUST RISER ON HOOD AND FAN (BY OTHERS)

## WALL MOUNT BRACKET



- WALL BRACKET FITS INTO BASE OF FAN
- SELF DRILLING SCREWS SHOULD BE USED FOR UNIT ATTACHMENT TO WALL MOUNT BRACKET
- \* DIMENSION = 5' WHEN USED WITH DAMPER
- \*\* CENTERED IN WALL MOUNT

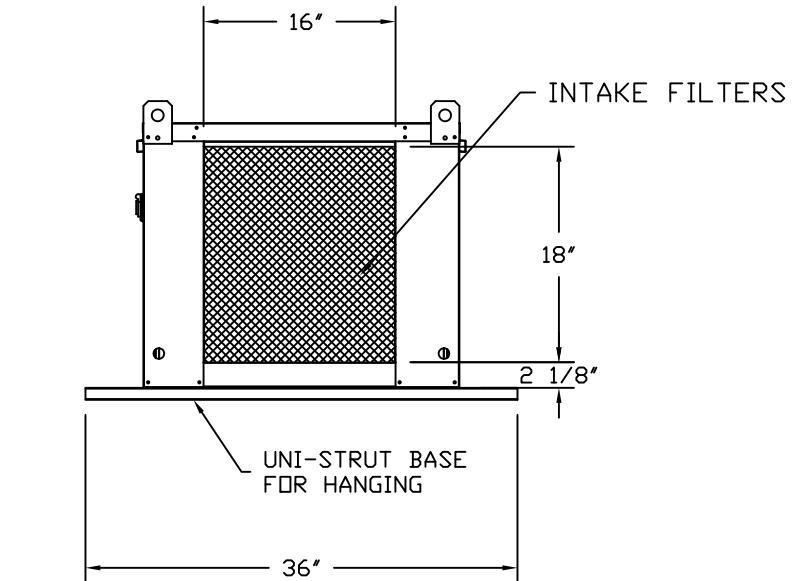
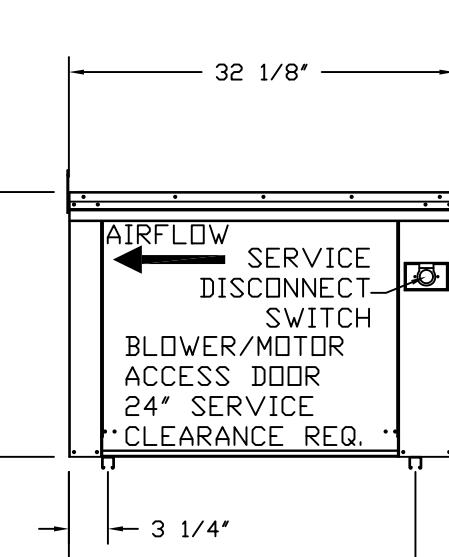
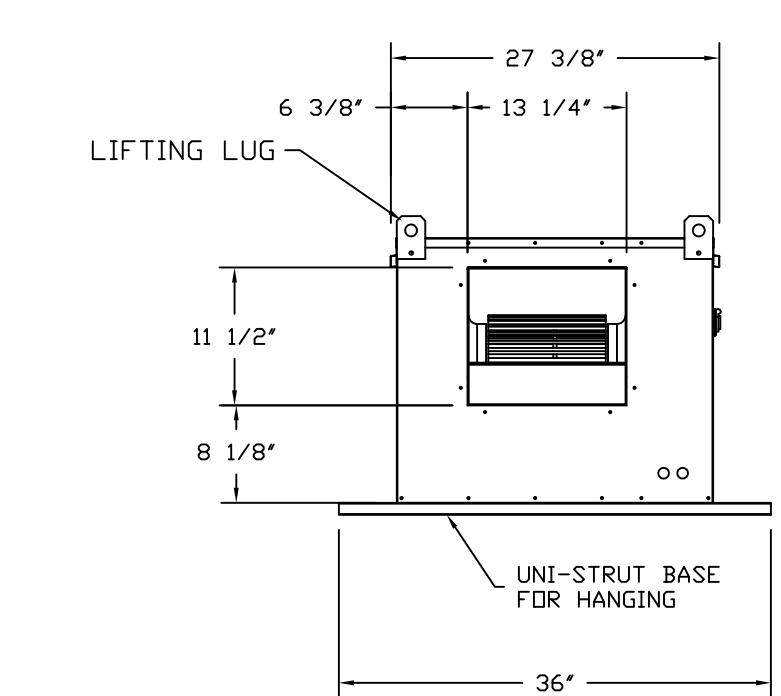
FAN #2 INLINE1L-G10 - SUPPLY FAN  
1. LOW PROFILE INLINE SUPPLY FAN W/ 10" BLOWER IN SIZE #1 HOUSING. INSULATED HOUSING.  
2. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT  
3. EXTRA SET OF V-BELTS. ONLY TO BE ORDERED AS FAN OPTION AT TIME FAN IS ORDERED.  
4. INDOOR HANGING CRADLE FOR THE SIZE 1 UNTEMPERED INLINE UNIT. 2 HSA125 HANGING ISOLATORS PER UNI-STRUT INCLUDED.

### FEATURES:

- LEVEL 1 CONSTRUCTION - UL 705.
- HORIZONTAL AND VERTICAL MOUNTING POSITIONS.
- STRAIGHT THROUGH AIR FLOW.
- WHEELS BACKWARD INCLINED, NON-OVERLOADING.
- WHEELS STATICALLY AND DYNAMICALLY BALANCED.
- HEAVY GAUGE ALUMINUM CONSTRUCTION.
- ACCESS DOORS FOR WHEEL CLEANING.
- BELT TUBES AND GUARDS.
- EXTENDED LUBE LINES.
- 3/4" GREASE DRAIN.
- COMPANION RING INLET
- COMPANION RING OUTLET

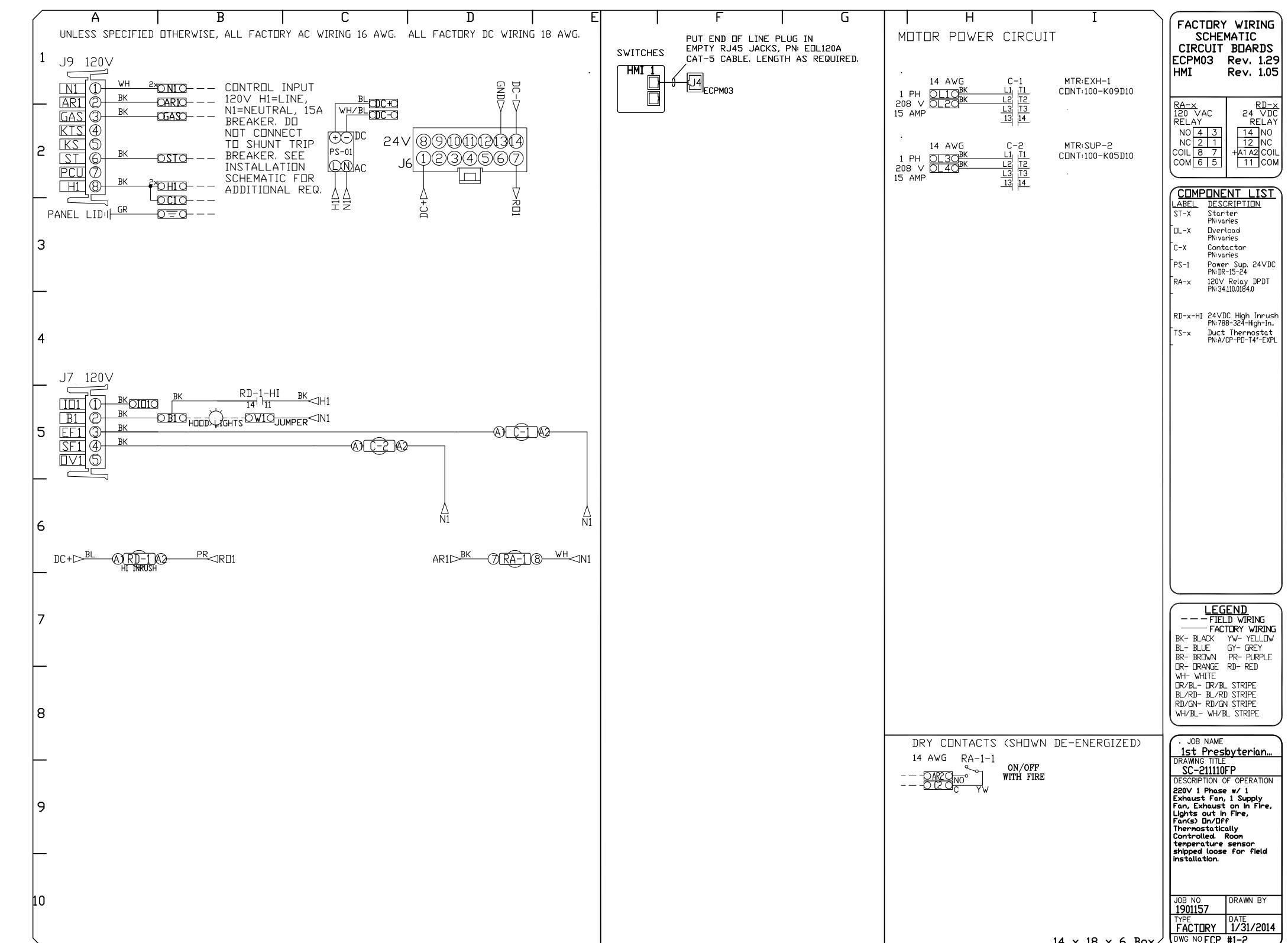
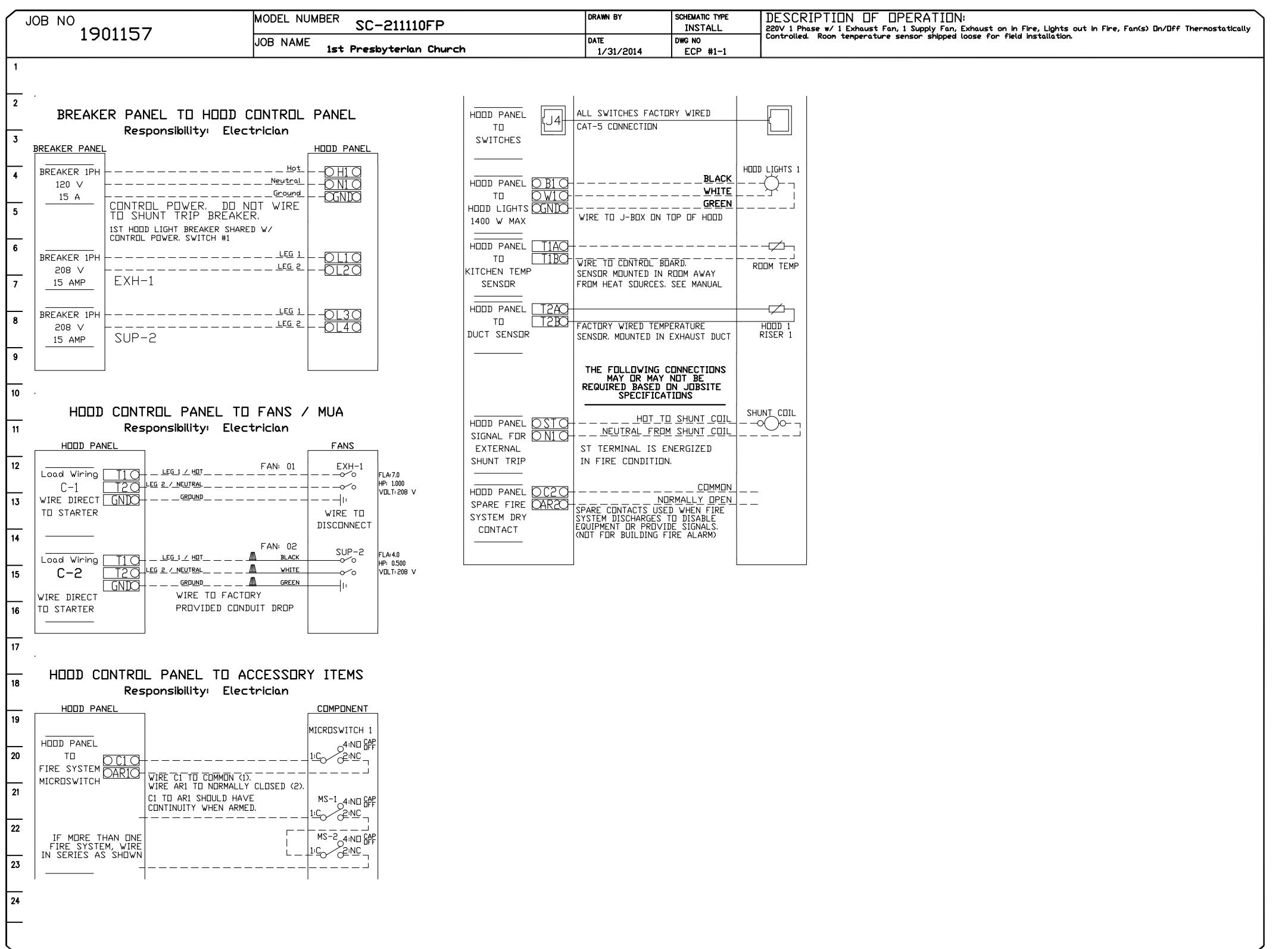
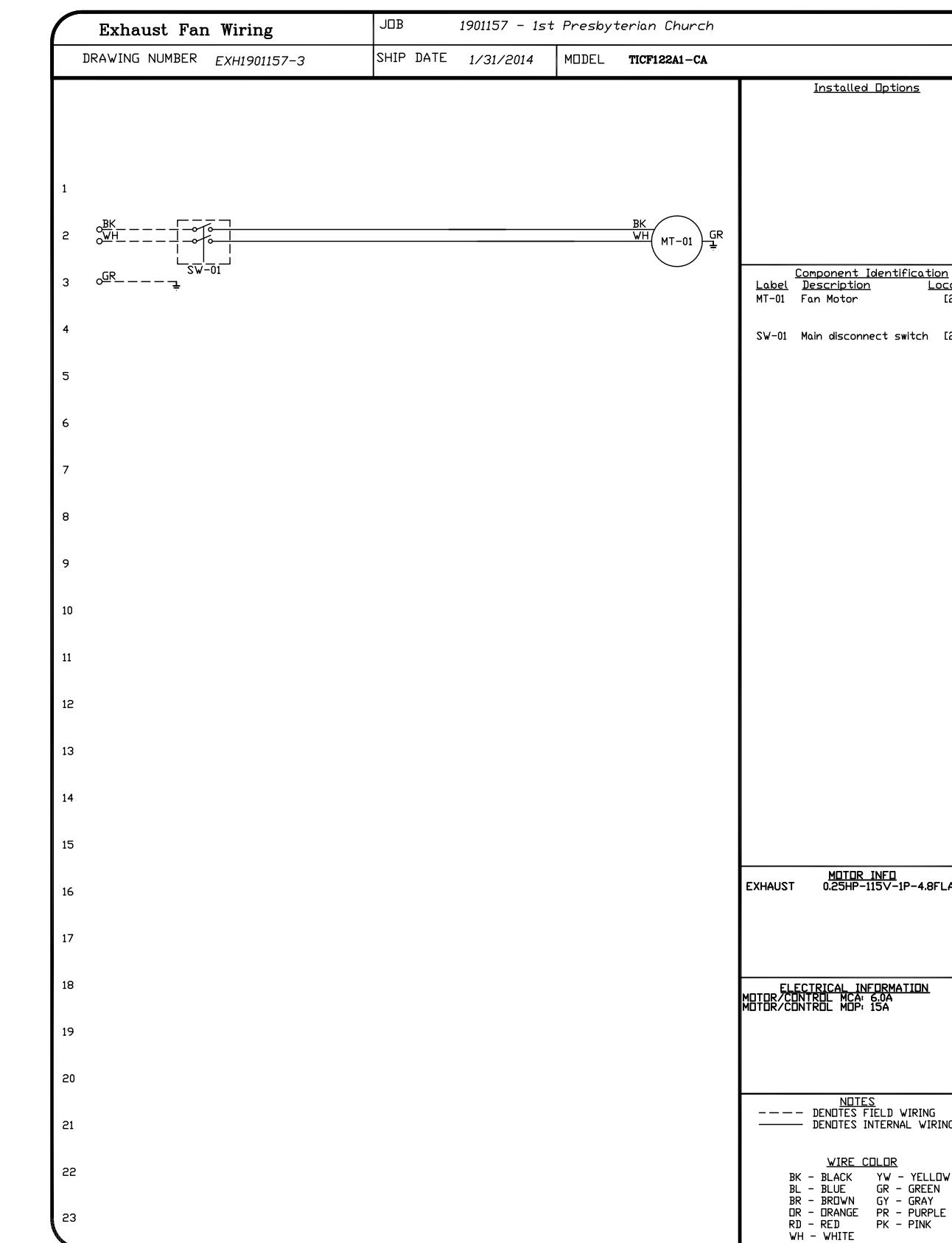
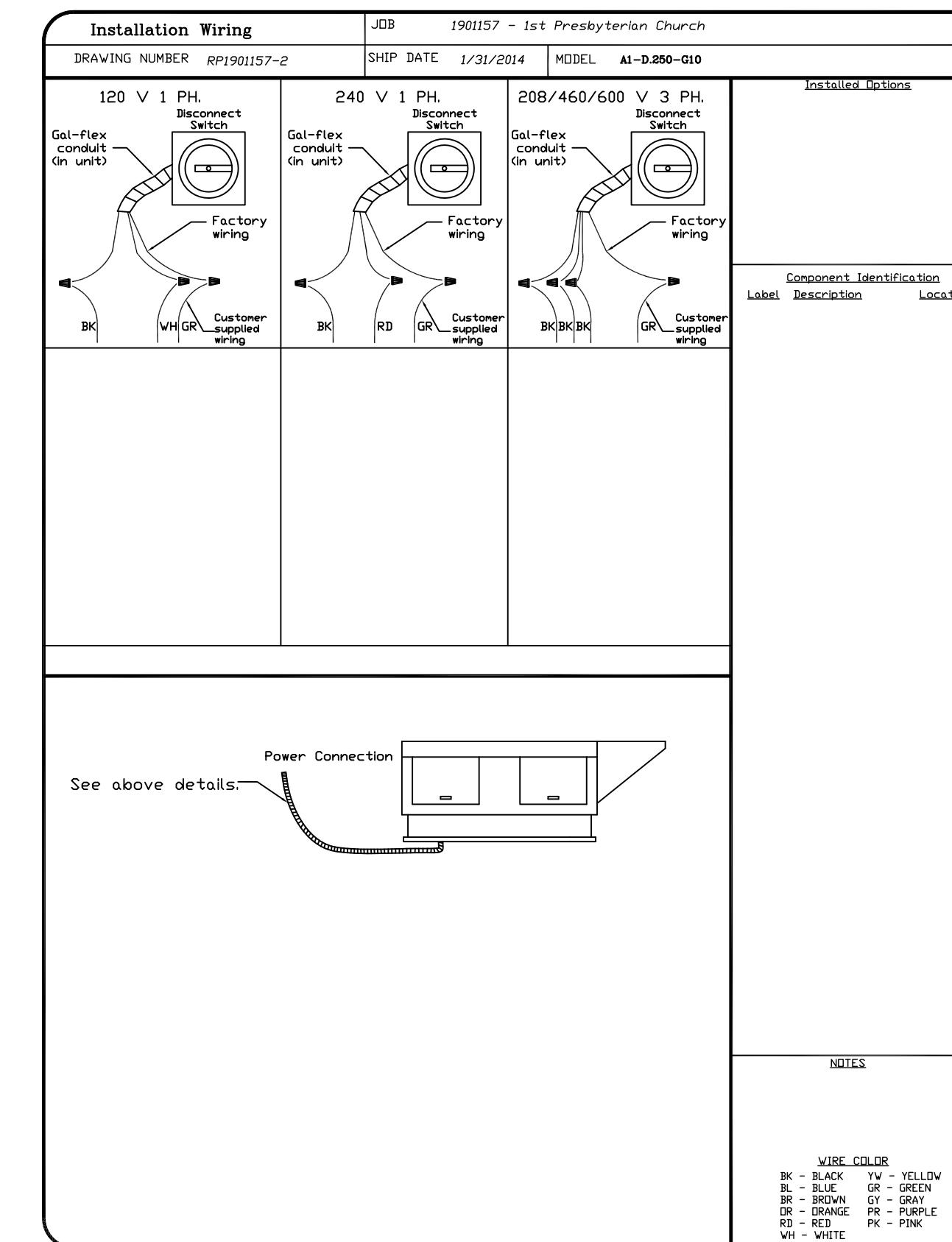
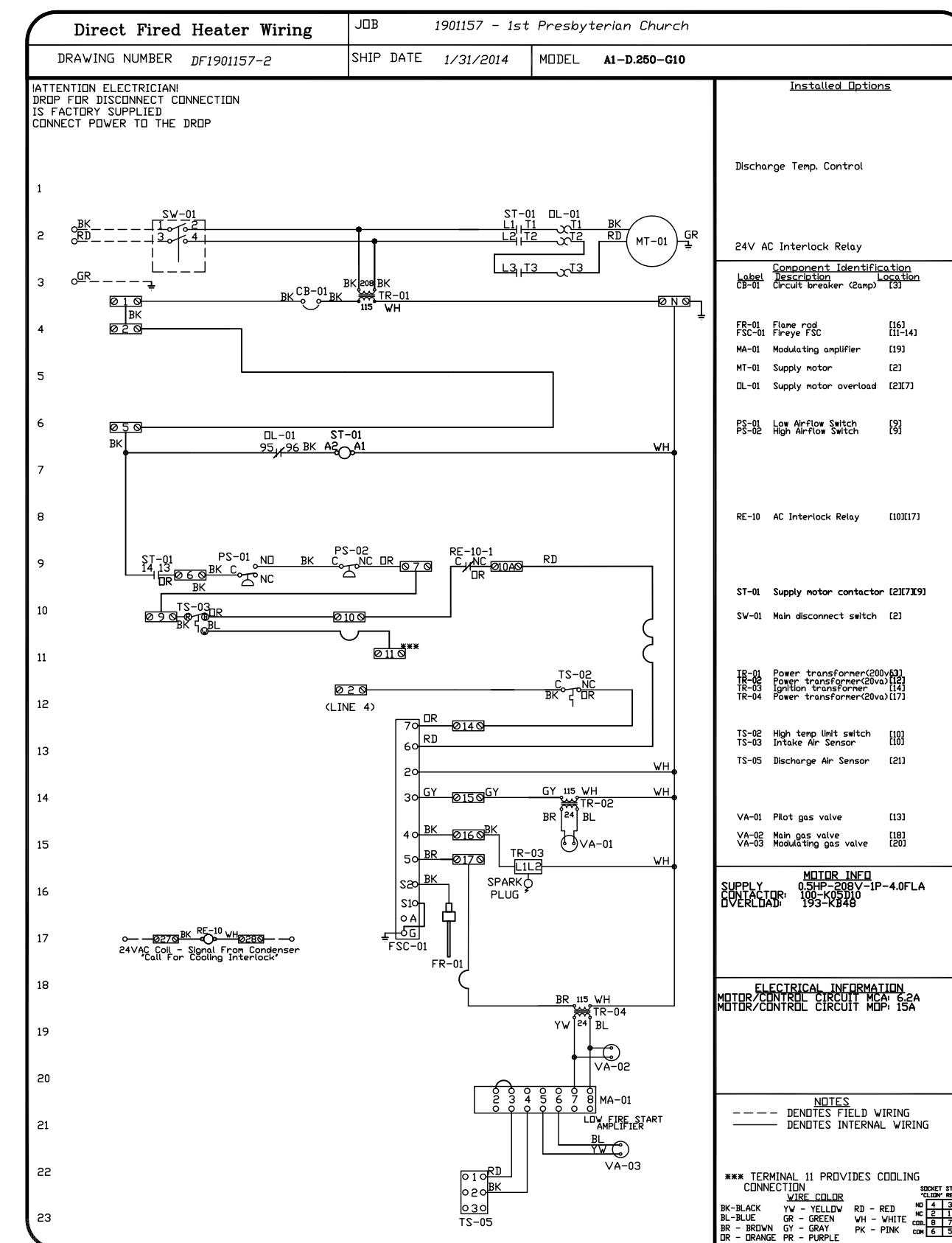
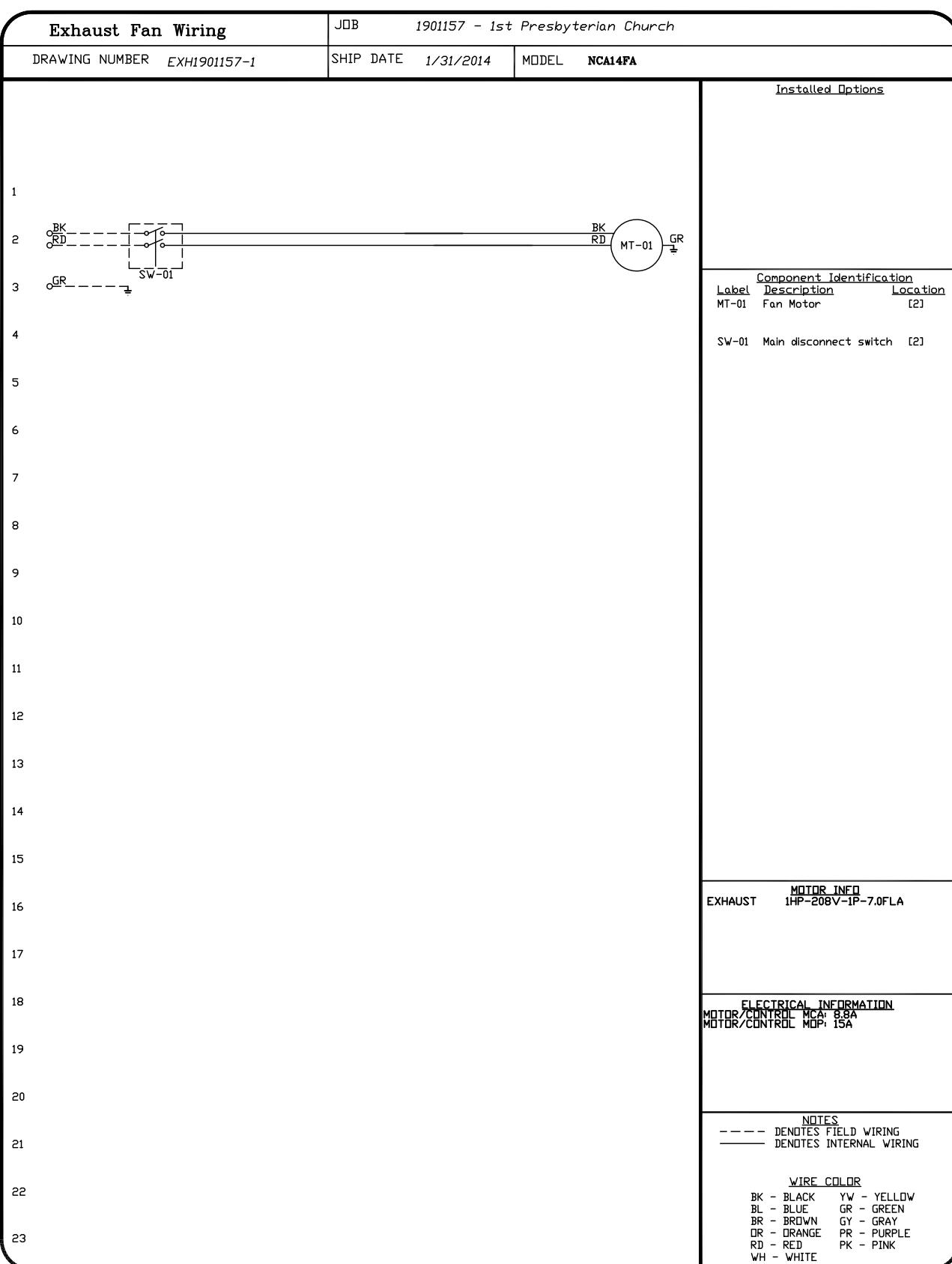
### OPTIONS:

- FLOOR SPRING ISOLATORS
- HANGING SPRING ISOLATORS
- DISCONNECT SWITCH
- MOTORIZED DAMPER



**SHEET NO.**  
2

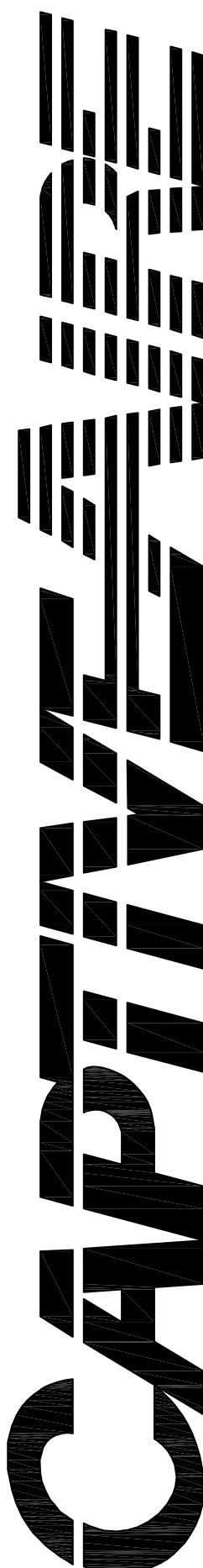
ELECTRICAL PACKAGES - Job#1901157											
NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Ø	H.P.	VOLT	FLA
1		SC-211110FP	Utility Cabinet Right	Utility Cabinet Right	1 Light	Smart Controls Thermostatic Control	Exhaust	1	1.000	208	7.0
				Hood # 1	1 Fan		Supply	1	0.500	208	4.0



11st Presbyterian Church  
ASHVILLE, NC

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## Blue Ridge